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Project Work in the Secondary School

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Contents

Introduction	ix
1 THE PROJECT METHOD	i
2 INDIVIDUAL ASSIGNMENTS	10
3 THE EARLE SCHOOL EXPERIMENT Project on 'World Problems of Famine, Health and Refugees'	23
4 THE SECOND EARLE PROJECT 'Aspects of the Social Services'	60
5 THE PROJECT METHOD IN CONTEMPORARY SECONDARY EDUCATION	71
Bibliography	88

Illustrations



1. Example of guidance card for assignments on 'countries'.
2. Example of a master check card.
3. Example of guidance card for assignments on industrial topics.
4. Average % attendance of the age group (first project) during its years in school.
5. Facilities for home study.
6. Number of mothers working (children in project group).
7. Number of mothers working (all children in the school).
8. Groups and topics of all children in the fourth year.
9. Guidance sheet given to each child in the first project.
10. Guidance sheet given to each member of staff in the first project.
11. Number of visitors to first project exhibition.
12. Average class marks for map test.
13. Fourth year attendance record during summer term.
14. Percentage weekly attendances of combined fourth year during summer term.
15. Pattern of fourth year age group's attendance over four years.
16. Children's attitude to school.
17. Scheme of work for a group in the second project.
18. Influence of project on reading habits.
19. Influence of project on homework habits.
20. Photographs of children's work from first and second projects (between pages 78-79).

Introduction

There are many children in Secondary Modern and Comprehensive schools to whom the last years in school become, in varying degrees, purposeless and boring. It is natural that boys and girls should look forward to starting work, but regrettable that they should count the weeks and days so obviously. The increase in the number of children taking external examinations has provided some with an incentive, but in turn this has meant that attention is paid to the children in examination classes often at the expense of others. This is particularly so if the staffing position is poor. In the larger schools, including Comprehensive schools, attention is given to the examination and less able classes, and the latter are frequently formed into a specialist department; but the children of average ability can so easily be allowed to spend their time in a vacuum. Many of these children are subjected to a curriculum far too academic in content and method.

The Newsom Report emphasised the need to consider the requirements of average and less than average children, and drew for its illustration on the variety of imaginative, purposeful work being attempted by some Secondary Modern and Comprehensive schools. Unfortunately such work is undertaken by too few schools. One of the reasons for this is that some head teachers and their staffs, although aware of the need for a new approach, are hesitant to undertake activities which might entail disruption of the timetable and curriculum. Others are reluctant to attempt work about which they know little. The publication of new schemes and methods which other teachers have found successful, can encourage colleagues to follow similar activities and, perhaps more important, develop and adapt them to meet their own requirements. In this way teachers may be able to overcome the apathy which descends on so many fourth year leavers and, at the same time, find alternative methods for examination classes. The decision to raise the leaving age in 1970 brings the matter into sharper focus, as emphasised in Working Paper No. 2 of the Schools Council.

For these reasons it is hoped that this account of the project work conducted at Earle C.S.M. School, Liverpool, will prove helpful to the many teachers who come into contact with boys and girls at the secondary stage, at all levels of ability. Although

INTRODUCTION

the work is essentially concerned with a method of teaching, it does refer to aspects of curricular content. The Earle School projects were not designed as statistical research although some statistics have been obtained.

The book, above all, puts on record the efforts of the fourth year children and the co-operation of the Staff at Earle. It has been written with the support and assistance of individual members of staff. I am indebted to Mr D. Harris, the Headmaster; Miss A. Bury, the Deputy Headmistress; Mr D. P. Thomas, Head of the English Department; the late Mr T. M. Hatfield, Head of the Mathematics and Science Department; Mr J. Lee and Mr G. Cutler, Woodwork Department; Miss D. Thomas and Mr R. P. Scott, Geography Department; Mr A. Newby and Miss J. Stuart, Art Department; Miss L. Owens, Mathematics Department; Miss F. Witter, Science Department; Miss J. Rushton and Mrs A. Carter, Domestic Science Department, and to other members of staff who all assisted in many indirect ways.

I am also indebted to Mr K. P. C. Millins, formerly of H.M. Inspectorate and now Principal of Edge Hill College of Education, Ormskirk, for sowing the seeds of the idea to undertake a major project; to Mrs M. G. Rogers, St Katharine's College of Education, Liverpool, for her co-operation in the second project; to the head teachers and staffs of those schools whose projects are described in the final chapter; to the Director of Education, Liverpool, for permission to refer to the school and its work; to the Editors who have allowed me to quote from reports; to Mr J. D. Carsley, the University of Liverpool, for his advice in the early stages of preparing the work and to Mrs J. Baker, Mrs A. Highcock and Mrs D. Ayrton, who all shared in typing the manuscript.

Finally I must thank my wife, Esmé, for reading the manuscript in its many stages of preparation.

G.C.

August 1966

ADDENDUM

Since it is now some three years since this experimental work was carried out, I feel it only fair to add that the Headmaster has since left the school for another post. Secondly it should be mentioned that in the last years the Earle neighbourhood has been comparatively free from gang violence.

I

The Project Method



Over the years various methods of teaching have appeared in education, each one recommended by its advocates as the panacea for educational problems. Whatever the validity of such claims, it is essential for education that new methods of teaching are developed and tried.

Some teachers prefer to continue on old and well-tried lines, others rush headlong into any new method without first examining the principles behind it. Both attitudes do little to further education; the one resists any attempt to change or develop teaching method, the other uses an idea as an end in itself. Thus a 'happy medium' is required, in which teachers would be willing to receive new ideas and examine their basic principles, in order to modify existing practice in the right direction without attempting a revolution.

Education can never be static, for it deals with people who are changing and growing. All through the ages educational aims have expanded and developed to keep pace with the changing conditions of life, and a change of aims must involve a change of method. Therefore new ideas and methods are essential, but as method is an individual matter, depending on personal factors, it is even more essential that a teacher should examine critically any new ideas and, if necessary, only utilise what will be of benefit to himself and his pupils.

The Project Method has often been attributed to John Dewey, but it is really the creation of his colleague at Columbia University, W. H. Kilpatrick. One of the earliest sustained trials with the Method was conducted by Kilpatrick's pupil, E. Collings, in a rural school in Missouri. Nevertheless the Method is a natural extension of Dewey's own teaching.

The Method was not entirely new for project equivalents were

advocated for the adolescent child by Rousseau in *Emile* (Book 3). He believed that activity, experience and well-regulated freedom, guided by the teacher, would best serve the needs of adolescence. Similarly many activities prescribed by Froebel for boyhood education are reminiscent of the Project Method and Dewey himself acknowledged the debt he owed to him.

In the first two decades of this century Dewey's philosophy of education influenced thinking, and he applied it in schools in a manner which revolutionised educational practice. He believed that the process of educational thought was more important than the results of thought, and that mental growth would come through a child's active participation in the solution of problems real to him. Education had to replace chance activity by activity that resulted in genuine knowledge and genuine understanding. Dewey called this the 'problem method of teaching', and it was reinterpreted by Kilpatrick as the 'Project Method'. In this form the ideas were more acceptable to teachers and that is why the 'activity method' and projects are thought of as one and the same thing, although in fact projects are only one way of applying the 'activity method'. Another variation of the activity method, namely individual assignment work, as developed by Helen Parkhurst in the Dalton Plan, is described in Chapter 2.

Dewey's emphasis on learning through experience is a reminder that the Project Method is, in fact, the oldest method in the world. It has been the primary method of education for human beings through the ages and the means whereby all civilisation has come about. Man has learnt through purposeful experience, and although in education there is purpose, that of teacher and child has all too often differed. The teacher has taught what he thought would be purposeful and useful to the child, but the child has not always had the insight to look on it as such.

In school one way of providing a purpose for the child is to make the subject interesting, remembering that interest depends on the child and not on the subject. When a subject cannot be made interesting *per se*, some teachers introduce a system of rewards and punishments as a spur. Interest created in this way is artificial and often fades when the stimulus is withdrawn, al-

though, as I found in the project to be described in Chapter 3, considerable benefit can be obtained by exciting emotions, such as pity and sympathy. The Project Method, however, seeks to educate the child through purposive activity, as the human race has educated itself.

Jean Armstrong in her book, *Projects and Their Place in Education*, says:

All true education is rooted in reality. Reality is in making things and doing things, and to do this certain qualities of mind and character need cultivation. The teacher's problem is so to arrange work and so to teach that steady, progressive development of these qualities is ensured.

By 1920 the old rigid ways of education, established by Victorian stress on conformity, especially in elementary education, were being gradually abandoned. The Hadow Committee in 1926 showed its faith in the new ideas by recommending more 'activity'. In anticipating the Secondary Modern school, the Committee reported:

There are many minds; and by no means of an inferior order, for which the most powerful stimulus to develop is some form of practical or constructive activity.

It further recommended:

A humane or liberal education is not one given through books alone, but one which brings children into contact with larger interests of mankind; and the aim of the schools in categories II, III, IV above (schools similar to existing selective Central, non-selective Central and senior classes of Central Departments) should be to provide such an education by means of a curriculum containing large opportunities for practical work and related to living interests.

These recommendations, put forward by the Hadow Committee in its report on the Primary School, were reiterated in the Spens Report which, although examining Grammar and Technical schools, advocated that 'The Secondary Curriculum should be thought of in terms of activity and experience, rather than of knowledge to be acquired and facts to be stored.' It thereby assumed that knowledge would result from 'activity'.

PROJECT WORK IN THE SECONDARY SCHOOL

Much thought was given to these questions of method, and an indication of current views was given in the White Paper preceding the 1944 Education Act in which it was stated:

But laws cannot build better human beings and it is not the machinery of education so much as its content that will count in the future. Public opinion will undoubtedly look for a new approach to the choice and treatment of school subjects after the war.

The Modern school, which was established as one of the forms of secondary education after 1944, was a school which at the time educationalists hoped would be free of the academic restrictions of the Grammar and Technical schools. Within the principle of a secondary education for every child according to his age, aptitude and ability, it was hoped that teachers in the Secondary Modern schools would be free to develop syllabuses and methods suited to the children they were to teach. As these children were, in theory, to be selected for the Modern school by virtue of the fact that they would not be suited to an academic education, it was envisaged that the curriculum of the new schools would have a practical bias, with opportunity for activity.

A new approach was required if the Modern schools were to face the problem of educating their pupils realistically. H. C. Dent wrote in *A New Order in English Education*:

Large sections of the educational system are bound hand and foot to an academic, bookish and sedentary curriculum, wholly irrelevant to the life and needs of any modern society, tied to objectives which restrict its central field to the kind of training which can be imparted by instruction and tested by examinations, and condemned to a mass production technique which makes real attention to individual needs all but impossible yet virtually excludes from the classroom any and every form of genuine collective activity.

In view of the wide diversity of ability amongst children entering the Modern schools, it was felt that teachers must be free to work out their own syllabuses and methods and be ready to experiment and to adapt their methods to the needs of the pupils.

In *The New Secondary Education*¹ the need to find a new approach is emphasised:

¹ Minister of Education, Pamphlet No. 9, 1947.

Perhaps the main difference between a Modern school and other types of secondary school is its very broad outlook and objective. It has to provide for children of widely differing ability, aptitude and social background. It has to cater for the needs of intelligent boys and girls, for those with a marked practical bent, as well as for the special problem of the backward children.

The views expressed in *Learning and Teaching*² are particularly interesting in this context.

The Ministry of Education regarded the Project Method as one of the most promising lines of solution in the Modern school. The Method was defined as 'the relation of a whole body of work in several fields to a central core of interest'. The Ministry pointed out that it could be approached in various ways and that it allowed for much variety of treatment. The three fundamental conditions were that there should be aspects of the selected topic which were familiar to the children in their everyday lives, that the work should be co-ordinated and purposeful and that progress should be sufficiently systematic.

The Ministry hoped that to interpret the curriculum in terms of activity and experience would entail a continual departure from the traditional methods of class instruction in favour of individual work in acquiring particular skills and in project activities pursued in groups.

The principle upon which practical work was advocated for the Modern schools was based upon the belief that the children who would be entering them would be, generally speaking, intel-

² A. G. and E. H. Hughes, *Learning and Teaching*, 1945, pp. 269-70. 'If we had the courage to break away from the conventional view of the curriculum we should probably find that our pupils would in the long run acquire more facts than they do now. They might not be the same facts as we ourselves learned at school, but having been acquired with interest and related to some real experience they would be a permanent possession of the pupil and not a mere temporary decoration. They would be interrelated facts that compose assimilated knowledge and not unrelated facts that compose memorized information. . . . Now children of school age are still full of plans and schemes that we teachers arrange for them. Teachers and pupils, as we say, are at cross purposes.

'Under the Project Method an attempt is made to bring these purposes into line, and the work of the teachers is not so much to teach school subjects as to guide and organise the children's subjects.'

lectually inferior to those entering the Grammar and Technical schools, and would be more capable of practical work than academic work requiring words and abstract ideas.

From 1945 many Secondary Modern schools, exulting in the freedom given to them, undertook projects, at times almost to the exclusion of other forms of teaching, supported by the many educationalists who expressed their faith in the value of the Project Method.

Thus during the immediate postwar years many Modern schools either planned their curricula along project lines or utilised them as much as possible, in an effort to create purpose. This was felt to be essential for the success of the Modern school. As Dempster in his book, *Purpose in the Modern School*, wrote: 'Unless teachers, parents and pupils all share a common feeling that the Modern school is purposeful and worthwhile, this institution will not be accepted by society and will fail to gain the support it needs to keep it healthy and make it effective.'

It would be impracticable to describe the variety of projects conducted in Modern schools throughout the country during this period. H. C. Dent described, in *Secondary Modern Schools*, the most completely organised project he saw in a girls' school on the east coast near a large port, a project which has since been described by the Headmistress³: With a first-rate headmistress and staff, Dent admitted that the Project Method could be made both systematic and richly educative.

A. H. T. Glover, *New Teaching for a New Age*, emphasised the need to develop in children a spirit of enquiry and to break down departmental walls. His staff in a Junior Art Department of a College of Art decided that work should be planned on the pupil himself and his interests in relation to his environment. It was to be a visual and concrete way of learning and led to a series of projects for the eleven- to fourteen-year-old pupils.⁴

Despite the many benefits to be obtained by children and

³ F. H. Stickney, 'Studies in Education', *University of Hull, Institute of Education*, June 1947, pp. 28-35.

⁴ A. H. T. Glover, *New Teaching for a New Age*, 1946, Ch. 4. See also J. J. B. Dempster, *Education in the Secondary Modern School*, 1947, R. M. T. Kneebone, *I Work in a Secondary Modern School*, 1957.

teachers using the Project Method, there was from 1950 onwards a widespread trend from unconventional to more conventional methods in the Secondary Modern schools. This could have been due in part to the external pressures brought to bear upon the Modern schools, including the growth of internal and external examinations, and resultant academic courses and public concern about general standards of attainment and behaviour.

An important cause, however, lay in the failure of some teachers to derive full benefit from imaginative, well-organised educative projects. As H. C. Dent points out:

There have been some excellent projects displaying the eager spirit of scholarly learning, yet the books, diagrams and models displayed were the work of a few pupils; the others had evidently done little more than idle on the fringe of the project or at best do 'the fetching and carrying' it demanded. In other schools projects gave rise to much shoddy work of low standard and to a superficial show of learning. In other words not very much solid or systematic learning was being done and the children who stood most in need of this—the slow, the backward and the dull—were getting least of it.⁵

This apparent failure on the part of Project Method raises two important issues, to be discussed in later chapters; namely the need both to balance the curriculum with formal teaching and to organise any project thoroughly so as to demand the best efforts of all concerned with it. The Method makes far more exacting demands on the teacher than formal methods do, and John Milton's words, 'This is not a bow for every man to shoot in that counts himself a teacher', are apt in this respect.

The Ministry of Education, having encouraged schools to adopt the Project Method, felt some responsibility in the matter and instructed its H.M.I.s to investigate. In the Ministry's Annual Report for 1949 the following conclusion was recorded.

If many Modern Schools are now human, civilizing places with much to offer to the social and spiritual side of their pupils' development, far fewer seem to have come to grips with the problems of how to meet intellectual needs and how to stimulate fullest effort.

Many schools abandoned the project idea, others adapted it to meet the needs of the school, allowing it only a supplementary role in which it did not dominate the curriculum. Thus a balance

⁵ H. C. Dent, *Secondary Modern Schools*, 1958, p. 38.

PROJECT WORK IN THE SECONDARY SCHOOL

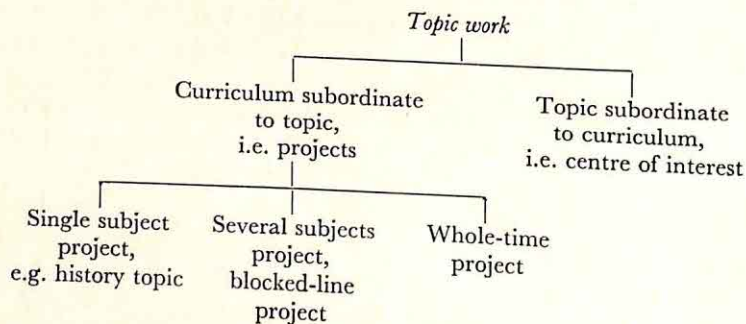
was achieved between 'academic' and 'active' methods of learning, between the basic studies so essential to the acquisition of knowledge and the exploration which can arouse interest and the urge to create. In effect, they either disregarded the syllabus for a period of time if they found a topic sufficient to arouse interest and suitable for development as a project, or they did project work whilst retaining such subjects as English, Mathematics and Physical Education.⁶ Even if the Project Method was not used in its complete form in which it dominated the curriculum, single subject forms could still be adopted.⁷ In some cases work of a project nature was undertaken in connection with Social Studies, thereby integrating two or more subjects.

In many ways it is to be regretted that the liberal aspects of the Project Method have been abandoned by so many schools for a more formal, sometimes examination-centred approach. Jean Armstrong, in *Projects and their Place in Education*, says:

⁶ Cf. J. Mander, *Class Room Teaching*, 1950, p. 128. An example of a 'blocked time' timetable, allowing for projects, etc., whilst retaining essential basic subjects.

	1	2	3	4	5	6	7
M	ENG.	← BLOCKED TIME →			ENG.	P.T.	MATHS
T	← BLOCKED TIME →		P.T.	MATHS	← BLOCKED TIME →		ENG.

⁷ Cf. *ibid.*, p. 127. The author classifies projects as follows, under Topic Work.



Of recent years it has been widely acknowledged that projects and centres of interest have something valuable to contribute to modern teaching practice, but today there are still many teachers who have lacked opportunity or conviction to work out their own ideas and experiments.

Although in a timetable allowing for a 'blocked time' project the basic subjects would be retained, an obvious development would be the inclusion of project work, allowing for the practical application of basic principles.

Even though the Project Method in its various forms may have disappeared from the curricula of many Modern schools, some teachers do utilise the valuable practical and research elements in their ordinary teaching, having selected those aspects of the Project Method which can be adapted to their own particular needs. In this way purpose and interest, considered so essential by Herbart, make lessons far less rigid than in the days of 'payment by results'. As Sir Cyril Burt says in his foreword to Hemming's book,⁸ 'The best method to achieve maximum retention of material, if essential for success, is to excite a personal interest in work and this is best achieved by active participation.'

With a decline in the Project Method, schools have looked elsewhere in an effort to create purpose and interest in learning. An increasing number have adopted examinations, both internal and external, but as H. Loukes wrote: 'The Secondary Modern school cannot be judged in terms of examinations alone. It must be judged in terms of other factors.'⁹ The experiments described in this book have been attempts to provide an alternative basis for judgment.

The decision to raise the school leaving age in 1970 has encouraged teachers to re-examine the content of the curriculum and their methods of teaching. In the process various bodies have shown a re-awakened interest in the integration of subjects and the Project Method.¹⁰

⁸ J. Hemming, *Social Studies in Secondary Schools*, 1949, p. ix.

⁹ H. Loukes, *Secondary Modern*, 1958, p. 21.

¹⁰ Cheshire Education Committee, *Fifth Form Courses in Secondary Modern Schools*, 1966. University of London Goldsmiths' College, 2nd Pilot Course for Experienced Teachers, 'The Raising of the School-Leaving Age'. 1966.

Individual Assignments

Before a teacher adopts the Project Method, several important decisions must be made. In the previous chapter it has been shown that projects can cover a single subject, several subjects or practically all subjects on the curriculum. Thus a teacher is at liberty to utilise the method most suited to the circumstances. Similarly he must decide whether the children are to work individually or in groups.

Although the individual approach has been used in teaching for many centuries, it was developed in recent years by Helen Parkhurst, who saw the need to release children from the deadening pressure of rigid discipline, autocratic authority and mechanical learning. A. J. Lynch wrote: 'Pupils have regarded teachers, not themselves, as responsible for their education. Is there any valid reason why the pupils should not be encouraged to work on their own along guided lines, consulting books and making experiments?'¹ These principles were inherent in the Dalton Plan laboratories. The Plan was established in 1912-13 for children between the ages of eight and twelve, and was operated fully in 1920 in the Dalton High School.

Helen Parkhurst rejected class teaching and made the classrooms subject laboratories in which the children pursued their own studies with the help of the specialist teachers and individual work cards. The syllabus in each subject was split into 'major assignments' covering a month's work, which the children carried out in their own time. The plan was, in effect, an attempt to provide education in self-development and social co-operation and to solve the problem of different grades of ability. It was adopted in England by several schools, notably Kirkstall Lane School, Leeds, and West Green School, Tottenham.

¹ A. J. Lynch, *Individual Work and the Dalton Plan*, 1924.

In refusing to put her name to the Plan, Helen Parkhurst hoped that her methods would not be followed as a blue print. To have made the plan rigid would have made it forbidding and to have stereotyped it would have reduced its capability of elasticity and development. Instead she desired the plan to be a growing thing, which the teacher could adapt to meet particular circumstances.

By allowing this freedom to teachers, Helen Parkhurst had ensured that aspects of the Plan would still be used in later years. Thus one of the main criticisms of the Plan, namely that it separated subjects into isolated compartments, can be overcome by integrating subjects, yet retaining the general principles of the Plan. This is one modification which I have made myself in recent years. I have, therefore, arrived at a point midway between the Project Method of Dewey and the Dalton Plan of Helen Parkhurst, combining the systematic aspects of the latter with Dewey's emphasis on the freedom and experience of the children.

For several years I have used this adapted method to meet both my own and the children's needs, taking into account the limitations imposed by the timetable and the nature of the work to be done. Both are important factors. The existence of specialist timetables in most Secondary schools makes it so much more difficult to plan even a single-subject project than in the Primary schools where children are largely with one class teacher for much of the time. Similarly a teacher should not adopt the Project Method regardless of the nature of the work, for some topics are less suited to such treatment than others. Thus in History, where I have made use of the individual assignment method for several years, I do not attempt to cover all work in this manner. In this way even children preparing for external examinations can afford to enjoy a break from more formal lessons, whilst covering a topic which could be of examination value.

Individual Assignments in History

Most of the occasions on which I have used this method have been with the third and fourth year classes, due primarily to the fact

that I have had few younger classes in recent years. In many ways this has been fortunate, for in the History syllabus I had allowed for more individual research topics with the senior classes. The syllabus for the older children, covering aspects of British economic and social history since the mid-eighteenth century, and developing in the fourth year to a study of world problems in the twentieth century, contained many topics suitable for individual study. Several examples of past projects immediately come to mind.

The Transport Revolution is a topic which provides a suitable basis for individual assignment work. If taken in chronological sequence, the children learn of the development of canals, to be followed by railways and some considerable time later the motor car and aeroplane. In this way the natural progression and interdependency in the development of transport are broken and often become isolated in separate sections in the children's minds. At the same time any attempt to do justice to all stages in the development would take considerable time and the teacher would run the risk of losing the interest of the children over a prolonged period.

In an attempt to overcome these difficulties, I have usually given a general introduction to the topic, covering the main points in the development of transport in the last two hundred years. The children have then been allowed to select one or two aspects in which they have some interest. The advisability of allowing children to have individual choice within any given topic is stressed by H. M. Knox in his book.² The various topics selected by the children could include: roads, canals, railways, steamships, motor cars, aeroplanes or bicycles.

In arriving at a method combining certain ideas of Dewey and Parkhurst, I have always found it useful to give children a general plan on which to base their work. With this initial guidance, boys and girls would obtain books, many of which I would make available from the History reference library, and start their research. It has been most reassuring to see how many have visited the School and Public Libraries and have written to industrial and transport undertakings for information.

² H. M. Knox, *Introduction of Educational Method*, 1961, p. 53.

Many of the boys, having completed their research into the historical development of their chosen topic, have displayed a remarkable knowledge of modern developments. This has been aided, in some instances, by a boy's own interest, some being members of the A.T.C. or Sea Cadets, others having relatives working on the railways. The school is situated very near the large Edge Hill junction, which was once the main line terminus before the extension to Lime Street station, and consequently many families have connections with the railways.

The final work, illustrated by excellent diagrams, pictures and, quite frequently, models, has in most cases been of a good standard and even the less able have produced work of which they could be justifiably proud.

The initial notes have been written on rough paper and corrected chapter by chapter. To keep a check on the progress of each child, I have drawn up a chart on which I could keep a record of finished work. In this way I have been able to see which children were finding difficulty and frequently it has been necessary to help some by adding to the guidance card a list of reference books suitable for their ability and giving some general assistance. The need for guidance was emphasised by A. J. Lynch, who wrote,³ 'In individual methods it becomes the teacher's business to know when to interfere and when not to interfere.'

Once all work had been completed and checked, the children would copy it into a booklet which would eventually have a suitably designed front cover and title. This I have found to be one of the most important and rewarding features of the work. All too frequently work is done in exercise books which, if not required by the children for examination purposes, are thrown away at the end of the year. I cannot think of a more soul destroying practice. By making individual booklets the children have seen some purpose in their work and most of them have been proud to leave the booklets in the class library, where they serve a useful purpose.

It is obvious that within the limits of a single subject such work would take many weeks. This factor, therefore, must restrict the depth of the work, unless time can be found elsewhere. One of the

³ *Op. cit.*, p. 25.

most pleasing aspects of my experiments with the individual assignment work has been the number of children who have voluntarily done work at home, although homework was not enforced in the school. It is interesting to compare the views of A. J. Lynch, who claimed that children who normally resent homework will often do topics of their own initiative.

A certain amount of difficulty has arisen with a topic such as the Transport Revolution when a class contains girls. Although they like to learn about the general development of transport, they do not possess sufficient interest to conduct individual research. To overcome this problem in girls' and mixed classes, I have often made provision for a parallel topic for the first, covering aspects of dress, houses and furniture in the last two hundred years. This topic has been studied in the same manner as the boys' and again some fine booklets and models have been made.

Another topic which I have found most suitable for this method and which has proved very successful is a study of the various social reforms of the nineteenth century. Children could select topics such as education, prisons, factories, mines, slavery, etc. This subject has always provided sufficient selection of topics to interest both boys and girls.

In all these experiments, however, the work has been restricted to a single subject. If one is to justify the criticism already made of the Dalton Plan, efforts must be made to integrate several subjects.

Individual Assignments in Integrated Subjects

As I have emphasised, attempts to integrate subjects are often limited by specialisation, examinations and rigid timetables, although many educationalists believe that in recent years there has been an awareness of the dangers of compartmentalisation of knowledge and the need for more correlation. From time to time opportunities do arise when, for example, a teacher has a class for several subjects, free of examination pressure.

One such opportunity arose several years ago when I was given a class of fourth year boys of mixed ability who had been put together as a class due to discipline problems. The headmaster

hoped to restrict the problems to one class, rather than have four classes disturbed. Many of the boys had caused considerable trouble in classes during the previous year, particularly with female members of staff. Several were also in trouble outside school, having been in the hands of the police for housebreaking and other offences. In view of the reluctance on the part of other members of staff to take this assortment of 'trouserless rascality' in its fourth year, when all but a few looked forward to nothing except leaving school, I found myself responsible not only for their History, but also English, Mathematics, Geography and Religious Knowledge. It was a challenge indeed.

Despite the reputation which accompanied most members of the class, I felt that they were not as bad as the reports would have me believe. They were growing boys, a fact apparent as they forced themselves into small desks with the characteristics of a Houdini, full of vigour and enthusiasm which at times had obviously got out of hand. I knew most of them through History lessons and sport and believed that given a sense of direction and purpose, without too many restrictions, they could turn their energies to more useful tasks.

In the early days of term following a period of discussion, I learnt that the boys disliked the routine of formal lessons which, at this late stage of their school career, they considered to be without purpose.

One day shortly afterwards we were discussing a programme on television which had dealt with India. Most of the class had seen it and in view of the interest shown, I thought it would be a good follow-up if we were to study other selected countries. The value of work based on the experience and interest of the children has been stressed by many educationalists,⁴ and as the class were undoubtedly interested I left them to decide which country each boy would like to study; the only condition was that I did not want more than two boys studying any one country, in order to

⁴ Cf. Ministry of Education, *The New Secondary Education*, Pamphlet No. 9, 1947, p. 30.

'The aim of the Modern school is to provide a good all round secondary education not focused primarily on the traditional subjects of the curriculum, but developing out of the interests of the children.'

provide a greater variety for the class library. Eventually out of a class of thirty-eight, twenty-nine different countries were selected. The next stage was to decide on the method of working.

In view of the fact that I had the class for five subjects, covering seventeen periods out of thirty-five in a week, we decided that we should utilise most of these periods for the project, leaving the occasional English and Mathematics lessons for any formal work which I felt necessary, as for example in letter writing, book stitching, lettering, etc.

Although some of the class had done individual assignment work in History, I decided again to give each boy a guidance card. Some teachers feel that to guide is to restrict a child's freedom, but John Dewey emphasised that the teacher must guide the exercise of a pupil's intelligence and that this was an aid to freedom, not a restriction.

FRANCE

A general guide, giving some of the points to be studied.

1. Brief history of the country (early settlement, growth, etc.)
2. Physical features of the country (use maps, etc. Give main towns, rivers, etc.)
3. Main industries
4. Pattern of agriculture Compare imports/exports.
5. General items (way of life, religions, sport, food, etc.)

Fig. 1. *A guidance card.*

The first essential was for the boys to obtain literature and other information on the country of their choice. In the first instance they wrote to the embassies or Commonwealth offices concerned, requesting booklets, maps, etc. Whilst waiting for a reply, the boys visited local travel agencies and many made use of the School and Public Libraries. Thus by the time the first replies to their letters were received, the class had already begun to make notes on their topics. Although some boys did better than others as a result of their enquiries, all had sufficient material with which to start. As time went on I noticed many had written to other possible sources of information, including industrial, commercial and shipping firms, and many obtained samples of products

which, as they increased, I arranged to keep in large boxes for safety reasons.

With such a diversity of work in progress, I found it essential to keep a detailed check on progress and as the notes on each separate section or chapter were corrected and put aside in a file, I noted it on the master card. To some such measures might appear unnecessary, but I have always found them valuable. A. J. Lynch, discussing the need for careful checking, wrote: 'No responsible teacher will undertake individual work, or any other form of work, without carefully checking the results as work proceeds. Check cards of some kind are a necessity.' Furthermore, as I had

	<i>Date when received</i>					
	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>
F. Barton	12/2	19/2				
A. Coward	11/2	—				
H. Jones	14/2	—				
R. Jones	12/2	—				
R. Moss	9/2	—				
O. Mullin	—	—				
E. Williams	—					

Fig. 2. *A master check card.*

learnt previously in less complicated projects in History, some children needed more guidance than others, particularly in the early stages when faced by a mountain of information. Once directed along the right path, the children concerned would continue with their work as well as any in the class.

As the project progressed interest increased and hardly a day went by when I was not asked to look after some item connected with a topic, including stamps, coins (which were fixed eventually in the booklets by an ingenious method using small plastic envelopes), banknotes, samples of rice, timber and other products, newspaper cuttings, postcards, photographs and items of dress, including a fez.

Another aspect of the work was the fine illustrations, including maps and graphs, which created a sense of purpose in geographical and mathematical exercises. The information for the

graphs, in fact, entailed processes with figures which many boys would have avoided in normal circumstances. It was, indeed, hard to believe that these were the same boys who several months earlier had refused to work and had caused so much trouble. In fact, if I had not witnessed the change myself I would have doubted Herbart's statement: 'When the environment is so arranged that childish activity can itself find the track of the useful and spend itself thereon, then government is most successful.'⁵

Eventually the time came when one by one the class reached the stage when each booklet could be written in its final form. With the notes corrected, the boys neatly copied out their work, transforming rough sketches and notes into praiseworthy booklets. Even at this late stage a more formal class lesson was required to give the fundamentals of a simplified 5×3 form of block lettering, to enable the class to complete the book covers. Some of the illustrations on the covers were quite remarkable and would have put any efforts on my part to shame.

Finally the booklets were stitched together and were ready to take their place on the library shelf. One thing remained to be done before the dust was allowed to settle. So far the boys, apart from exchanging items for the booklets, had not co-operated with each other. Remembering, however, that the idea had originated from a television programme, each boy was asked to read his booklet to the class, outlining the main points. These were discussed and compared in turn and it was interesting to note how the boys related the book under review with their own. One boy, for example, was quick to notice that Canada had far fewer people per square mile than the European countries. Questions were answered by the 'authors' in question and it was interesting to observe the extent of their knowledge.

Thus the wheel had turned full cycle and one programme had resulted in a series of miniature ones. In the process the class had learnt much about the country studied and something of the others. Their work had included aspects of all the subjects in which lessons the work had been done, although few associated the processes involved in transforming figures, etc., into com-

⁵ Quoted in G. H. Thomson, *A Modern Philosophy of Education*, 1927, p. 77.

parative graphs as Mathematics. They had used their powers of imagination to full effect and had planned, with some guidance, their own work. Above all, the sense of purpose created had influenced their attitude to school and consequently their behaviour improved and many left at Christmas with a far better testimonial than would have been considered possible at the beginning of the year. The only note of regret concerned three of the class who were charged during the term with further house-breaking offences. It would obviously call for more than a four-week project to change the habits influenced for so long by the social environment of the district.

So far as I, as teacher, was concerned the work made more demands than is usual in more traditional methods, but in view of the fact that most of these factors are to be examined and discussed more fully in the following chapters, I feel it is not necessary to do so here.

Other Experiments with Individual Assignments

Over the last six years I have utilised the individual assignment method on many other occasions, some incorporating several subjects, others restricted to my own subject, History.

Not all projects have proved completely satisfactory, due to various reasons such as staff absences, necessitating amalgamation of classes, and building alterations. Two of those which were successful come to mind.

One was undertaken with a second year mixed class of limited ability in English. The topic chosen, 'Food and Industrial Products', arose out of a talk and film show given by a visiting lecturer from the Commonwealth Institute, when children asked questions as to how the sap from a rubber tree was turned into rubber goods. Although this had been answered at the time by the lecturer, I was asked to go into further details when I met the class again. The interest aroused enabled me to see the potentialities of this and similar topics as a basis for individual projects. Although more closely related to Geography in content, I felt that the idea would form an excellent basis for English work. With the assurance from the Geography mistress that the work would not

PROJECT WORK IN THE SECONDARY SCHOOL

interfere with her syllabus for the class, the way was clear. After further class discussion we decided on several other topics, including Sugar, Cocoa, Cotton, Iron, Steel and Glass. In all twenty-eight items were selected. The children, in fact, were free to select a topic provided I felt that it would be suitable and within their ability.

Class.....	Name.....
GUIDANCE CARD	
Read all your books at least once before making any notes. Then make several columns on your note paper, one column for each of the chapter headings which we decided on in discussion. When you find some information for Chapter 1 or 2, etc., <i>do not just copy it down but put it into a few words of your own</i> and write it in the correct column. By the time you have read all the books, you will have several columns of notes which will become the 'bones' of your chapter. You can then add 'flesh' to them by writing them up into good English. As you write each chapter, let me correct it. You can then copy the corrected work into your Topic Booklet and add your maps, illustrations, etc.	
COAL	
<i>Chapter 1:</i> History of Coal (What is coal? How was it formed? When?) <i>Chapter 2:</i> Coalmining in the Past (How did they obtain the coal in the past? What were the difficulties?) <i>Chapter 3:</i> The Coalfields (Where are the coalfields? Why? Map.) <i>Chapter 4:</i> A Coalmine (Describe a modern mine. Take me on a tour.) <i>Chapter 5:</i> Uses of Coal (What can be made from coal? Collect samples.)	
REFERENCE BOOKS.....	

Fig. 3. Example of guidance card for assignments on industrial topics.

A general plan was drawn up for each child, covering the history of the product, methods of collection and transportation, processing methods and uses made of the product. The plan varied according to the nature of the topic and the ability of the child. The children spent the early lessons writing letters to firms, requesting information, and whilst waiting for replies obtained

1886

INDIVIDUAL ASSIGNMENTS

books from every possible source, visited local shops and began a collection of samples which far outweighed previous efforts by other classes.

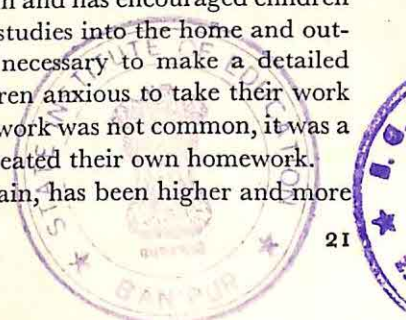
Once initiated the progress followed lines very similar to those already described, although obviously the work was not of the same high standard in view of the limited ability of the class. It was for this very reason, however, that I look upon this project as one of the most successful and rewarding, and I feel that the extra work which I was faced with was more than worthwhile. The industry, imagination and interest displayed by the children over three weeks were most unusual for a class of such limited ability. The looks of pride and satisfaction on the faces of the children when the booklets and material were exhibited in a classroom display were the real testimonials.

The second project was one based on 'The Commonwealth' and was undertaken by a fourth year mixed class in History and Geography. The work proved most topical in view of the negotiations being conducted at the time for Britain's entry into the European Common Market. Each child selected a Commonwealth country and studied aspects of its history and geography, including the general features of the land, the main industries and forms of agriculture. The preparation of the booklets followed lines already practised, with the children conducting research in their own manner. Although the work was partly interrupted when several of the class attended a school camp for a week, the results of the project were quite promising and gave every indication that the theme could be developed with success even further.

The projects or individual assignments already described represent a selection of those undertaken by my classes in recent years. Whether covering a single subject or more, the work has brought a sense of purpose into the classroom and has encouraged children to extend voluntarily their school studies into the home and out-of-school life. I did not think it necessary to make a detailed assessment of the number of children anxious to take their work home, but in a school where homework was not common, it was a pleasure to see the number who created their own homework.

The standard of work, in the main, has been higher and more

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Date 13.1.2006
Page No. 12133



creative than that achieved under formal conditions. As I have already emphasised, latent characteristics of industry, application and pride in one's work were developed. Children who had displayed a lack of real interest in work, particularly in the fourth year, often surprised me with their efforts.

The amount of work demanded of the teacher has varied from topic to topic and with child to child. I had to learn by experience when to interfere and offer my assistance. In this way I resisted any tendency on my part to impose my views on children who had their own ideas. Many children did not even require to follow my suggestions on their guidance cards and I was pleased to encourage this self-confidence, for as Nunn wrote: 'The highest types of work are those in which the worker sets his own strict standards of achievement. He finds his own opportunity of self-creation or self-expression.'⁶

In all these experiments it will be observed that the work has been restricted to subjects taken by one teacher. The success of the individual assignment method has encouraged me to extend the experiments to cover group work incorporating other teachers and subjects. The opportunity to do so arose in 1962 and the resultant projects are described in the following chapters. They were to prove a natural extension of the experiments described in this chapter.

⁶ T. P. Nunn, *Education, its Data and First Principles*, 1945, p. 100.

3

The Earle School Experiment

PROJECT ON 'WORLD PROBLEMS OF FAMINE,
HEALTH AND REFUGEES'

Organisation

LIVERPOOL EDUCATION COMMITTEE
EARLE C.S.M. SCHOOL
LIVERPOOL 7

The Headmaster, Staff and Fourth Year Pupils
request the pleasure of the
company of at an
exhibition of work based on research into
World Problems of Famine, Health and Refugees.

The exhibition, to be held in the school
on Wednesday, Thursday and Friday, June 20th,
21st and 22nd, 1962, will be open from
10 a.m.-12 noon, 2 p.m.-4 p.m., and 7 p.m.-9 p.m.

The opportunity to extend experiments came in April 1962, following a visit to the school by the Chief H.M.I. for North-West England and one of the H.M.I.s for Liverpool. Both showed a keen interest in the work being done with the fourth year classes and before leaving suggested that the school might well conduct a Project on World Problems of Famine, in view of the forthcoming Freedom from Hunger campaign to be opened later in the year.

In view of my interest in the Project Method I was given the task of organising the project on the suggested subject. Apart from this I was given no further guidance. Once I had given the task some thought, I saw that the freedom afforded a wonderful opportunity to extend the experiments and to incorporate as many suitable subjects as possible, in an effort to break the

watertight compartments in which traditional education is so often given. The problem of obtaining the co-operation of the staff, which so often proved difficult under a specialist timetable, was overcome on this occasion by the fact that the suggestion had come from an H.M.I. through the Headmaster. Thus, the staff, always most co-operative, readily agreed to the abolition of the fourth year timetable for a month in the summer term. Most felt, as I did, that a large-scale project could serve many useful purposes, morally, socially and educationally. The children who were to be concerned showed such an initial interest in the idea that, following discussion, we decided to extend the scope of the project to include health and refugee problems in the world.

1. The Need for a Project

In view of the problems of famine, health and refugees facing the world, it was fitting that the children should be allowed an opportunity to study them and before leaving school become aware of the suffering and tragedy still existing in the world, and the many ways in which they can help to find a solution. There is much to be said for the Swiss proverb, *Hinter den Bergen sind auch Leute*—there are other men in other valleys.

The possibilities aroused by the project were interesting. Teachers are forever searching for fresh material and methods by which to impart knowledge, to arouse and sustain interest and, more important, to develop in children an ability to reason, think and express themselves clearly. The teacher in the secondary school catering for external examinations has a ready-made incentive for his pupils, although many feel that examinations restrict the curriculum and overlook more important educational virtues.

The Secondary Modern school, however, has in its care children of a wide range of ability and only certain of its pupils will be suitable for external examinations, although many schools are entering children for examinations for which they are unsuited. Despite the introduction of the Certificate of Secondary Education, designed to cater for children between the 40th and 80th percentiles, there will always be a large proportion of

Modern school children unsuitable for any external examination and many more for whom a break from the more rigid syllabuses of the external examination would prove beneficial. These will be more numerous in some schools than others.

It is those children without the incentive provided by examinations or leaving certificates who often approach their final year with no real objective, other than to leave school as soon as possible. They are the children who need a fresh incentive, which should be provided by the school in one way or another, in order to overcome the inadequacy of compulsory state education and the demands of society. Many of these children, although unsuitable for any of the existing examinations, are nevertheless capable of work of a high standard, particularly if based on a practical approach, and it is to be hoped that they will be catered for in the new C.S.E. In the meantime it is essential that new incentives be applied to allow and encourage children to use their aptitude and ability to the full, particularly in the last year at school. The raising of the leaving age makes them even more imperative.

The problem of incentives for fourth year pupils varies in intensity from school to school, from district to district. It is just as incorrect to say that all selective schools have no problems as to say that all Modern schools have incentive problems in the fourth year classes. Much depends on the school, the facilities available, parental attitude and the social environment of the area and home. The first two points are important in that they can seriously restrict the curriculum and any imaginative schemes of work, but it is, perhaps, parental attitude and social environment which reflect themselves in the children and have a direct bearing on their attitude to school and work. As J. B. Mays wrote, 'In down town schools, education is an alien culture'.¹ Consequently schools situated in the built-up areas of the large towns and cities face a much more serious challenge if interest is to be maintained into the final months of a child's secondary school life.

The decision to undertake research (during the summer term, 1962) into the problems of health, hunger and refugees in the world was looked on with particular interest at Earle School, for the fourth year children who were to undertake the research

¹ J. B. Mays, *Education and the Urban Child*, Liverpool, 1962, p. 8.

PROJECT WORK IN THE SECONDARY SCHOOL

were, with the exception of five, all due to leave school within two months. The five children who intended staying on represented the first extended course beyond the normal leaving age in the school. It is interesting to compare this with figures in the survey made by J. B. Mays in the Crown Street area of Liverpool, which is adjacent to that in which Earle School is situated. In the year 1957-58 only one child from the whole of the survey area, supplied by eight Primary schools, stayed for a fifth year in a Secondary Modern school, compared with forty-four in one suburban school.

It may be worth while, at this point, to study the children who were called upon to conduct the research work. As they comprised the whole of the fourth year, they naturally represented a wide range of intelligence, from approximately 115 to 70 points of I.Q. (on the 'Northern' Test of Educability).² Throughout their school career, it could be said that their work, apart from that in practical subjects, had been subject to the same wide variations. With no external examinations to provide an extra incentive—over the whole year only five per cent of this age group had taken external examinations for entry to schools and colleges of further education or contemplated staying for a fifth year—it would be interesting to see if the project could maintain and even increase interest throughout the last weeks at school.

Later examination of the attendance record of this age group throughout its four years at Earle, excluding the last term, showed that a gradual decline had been taking place since the first year. It is impossible to say whether this was due to illness, home demands or lack of interest, but I feel that the latter had a considerable bearing on attendance in the later years at school. The task of ascertaining actual attendance figures in the third year was made more difficult by the fact that in that particular year, third and fourth year were mixed. However, the figures obtained are reasonably accurate.

The home background of the fifty-six children involved pre-

² This compares with the intelligence range of 56-109 on the same test amongst the first year intake in September 1963. It also compares with the average of 100.17 (Terman Merrill) for the Postal District, as quoted by J. B. Mays, *op. cit.*, p. 138.

sented, in many instances, a poor picture. Conditions in many cases did not allow children the opportunity to study had they wished to do so. From conversation with the boys and girls it was possible to gain some indication as to the extent of parental

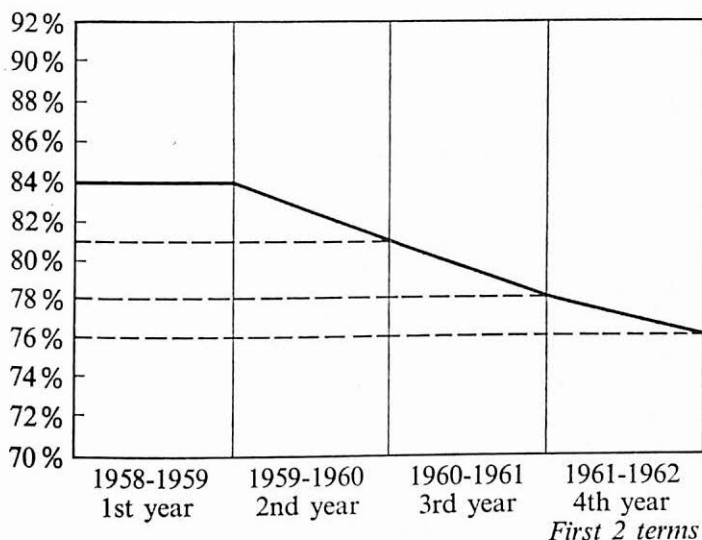


Fig. 4. Average % attendance of the age group during its years in school.

interest. In many cases it was very limited indeed and bore out the views of Dr J. B. Mays who wrote:

In many of the old slum schools of Liverpool, Manchester, Glasgow and London one comes across teachers who assert that, in spite of the additional year's schooling, there is less interest than ever in education and little desire, either on the part of the children or their parents, to secure any form of selective schooling or to pursue any branch of further education. . . . People living in the inner-city areas were characteristically apathetic about education.³

Those with a room in which they could work alone...36

Those without any room...20

Fig. 5. Facilities for home study.

³ J. B. Mays, in *Education*, December 1961. Cf. J. W. B. Douglas and S. Wiseman (see bibliography).

PROJECT WORK IN THE SECONDARY SCHOOL

Information given by the children provided a clear picture of the number of mothers who were working full- or part-time, a picture representative of the district in which Earle is situated.

Mothers working part-time...	9
Mothers working full-time...	29
Mothers at home all day...	11
No answer...	7

Fig. 6. *Number of mothers working (children in project group).*

A survey conducted amongst the whole school in June 1961 gave the statistics shown in Fig. 7.

No. of children questioned...	480
Mothers working part-time...	91
Mothers working full-time...	229
No answer...	43

Fig. 7. *Number of mothers working (all children in the school).*

Whilst these figures in themselves do not indicate the extent of parental interest, they are, in such an area, an indication of the additional demands made on children, particularly girls, in running the home and looking after younger children, often to the neglect of their school work.

The school, situated in a thickly populated area of central Liverpool, is bounded on all sides by streets of small terraced houses, many in an advanced state of decay in spite of the conscientious efforts of some of the tenants to improve the appearance. Nearby is the large Edge Hill junction, with its sidings and railway sheds. Throughout the district are blocks of flats, some built in the 1930s, others more recently constructed. All show signs of the character of the district, for the exterior walls and fittings are badly marked and damaged. The electoral ward of Smithdown, in which the school is situated, has a large proportion of its houses scheduled for demolition, and many of its inhabitants will be rehoused in the newly erected flats or moved to housing estates in the suburbs.

The children who took part in the project gave me an indication of the conditions under which many lived. Over half had no bathroom or fixed bath, whilst a third had no means of obtaining hot water other than by kettle. The housing situation is similar to many areas of Liverpool lying in the inner zone. The city, built on the north bank of the River Mersey, has developed outwards over the years in a series of semicircular arcs, and much of the inner zone has now reached the age when it can only be classed as a slum area. The task of rebuilding, in spite of the efforts of the Corporation, will take many years. In the meantime the task of educating the children in these areas will remain more a social problem than an academic one.

The area surrounding the school has been referred to as 'Murder Mile' on many occasions, as a result of several murders in postwar years. The district is often terrorised at night by teenage gangs who roam the streets and assault innocent adults and children, and frequently one can read of incidents reported in the local and national newspapers. Many of the children in the school, particularly girls, admit that they are too frightened to venture on the streets after seven o'clock. Colleagues who serve on the staff of the Recreational Centre, open on two evenings per week for children up to the age of fifteen and held on the school premises, have frequently had reason to ask for police protection when gangs have tried to force an entrance or create disturbances.

The district is also noted for the large number of crimes committed by both adults and children. The latter are largely concerned with 'breaking' offences and the annual figures issued by Liverpool Police show that the eleven to fifteen age group is by far the worst. It is impossible to say with accuracy what proportion of these crimes have been committed in the area surrounding the school, but the influence on the children in the school can be judged by the fact that over a period of six years, some sixty-one children had been involved in court cases, nine sent to approved schools and an estimated fifty had been on probation at least once. The influence of family environment can be estimated by the fact that one boy in the project group had eight male relatives in prison at one time. It is little wonder that he himself had been in court. The overall figures, large though they are, compare

PROJECT WORK IN THE SECONDARY SCHOOL

favourably with those from other schools in the inner zone and city centre.

The causes of social unrest are a combination of several factors. Basically they are problems to be met in any urban industrial area. In the case of Liverpool the problem is accentuated by the extent of the 'slum' areas and, as is to be expected in a port, the presence of many nationalities. The area south of the school contains a large number of Chinese, Indian, West Indian, African and many other immigrants. Whilst the majority behave as decent citizens, some do appear to increase the amount of rivalry and unrest in the district. This was borne out during an outbreak of gang violence several months before the project commenced. Several boys eventually told me that it had been caused by 'white' girls associating with coloured gangs from Upper Parliament Street and the Dingle area.

Social morality is at a very low ebb and even within the school the family histories read like fiction. The headmaster believed that promiscuity was to be found even within some families. In his report for the Newsom Committee enquiry he estimated that a large proportion of the girls in the school, living in such conditions without the essential parental control, were no longer virgins. Such a view may seem unrealistic, but it is indicative of the local conditions as seen by a headmaster who had served many years in the area.

Serious unemployment is another factor which has affected families in the district, although in recent years an improvement in employment opportunities has been seen.

Of the fifty-six children in the project group, nine had fathers unemployed at the time, whilst several others intimated that their fathers were dead or living away from home. Of those fathers in employment, only three could be classed as being in the clerical/non-manual occupational group and six in the skilled manual occupational group. The remainder occupied semi-skilled and unskilled manual jobs.

The many social handicaps by themselves do not have any direct bearing on the work in school and the project in particular, but such conditions must have some effect on the attitude of the children and the standard of their work. As such they presented

a challenge, a challenge which in many schools proves too difficult to overcome through ordinary methods, without the use of incentives. Would the project in integrated subjects provide an even greater incentive than that already experienced in the individual single subject projects?

2. Planning the Work

The fourth year at the start of the summer term consisted of fifty-six boys and girls, comprising three classes. Of these, class X, consisting of boys and girls, represented in the main the 'A' stream. Classes Y and Z consisted of girls and boys respectively whose ability ranged from near 'A' standard to 'D' standard.⁴

As organiser of the project, I had to decide how best to arrange the programme of work without disrupting the timetable and the remainder of the school. I was fortunate in my position of organiser that as History master I was the only member of staff to take all three classes concerned with the project. This gave me a good basis on which to plan the programme.

A general pattern immediately emerged by which every child could actively participate in the work. Participation by all fourth year children was the main objective, for I have always believed that given the necessary incentive and sense of purpose, boys and girls would be capable of work of a higher standard than would normally be expected.

In view of the number of children and the range of topics to be studied, the children were arranged in fourteen groups. The problems of Health, Famine and Refugees were each to be studied in four continents—Asia, Africa, Europe and the Americas. A further group would study the various problems more generally as a 'World Panorama', whilst a final group would examine the work of a selected group of relief organisations.

Within each group, composed of two to six children, each child was given an individual approach to the topic, along which he or she could conduct the lines of research. With such a wide topic,

⁴ According to record cards I.Q.s entered in the first year using the Northern Test of Educability were as follows: Class X 115-93; Classes Y and Z 96-67.

PROJECT WORK IN THE SECONDARY SCHOOL

requiring considerable reading and utilising a wide range of ability, it was essential that each child should know exactly what would be required of him. Although the children were to develop the work along their own lines, it was my duty as the teacher to provide the initial guidance. To those who would doubt the need for such guidance, I would point to the assistance often afforded students in universities and Colleges of Education in the preparation of theses and dissertations. By structuring the work to be done, it was hoped that the activity which was to follow would be purposeful.

From the many relief organisations available, it was decided to limit the project to the work of some five bodies in the initial stages:

The Oxford Committee for Famine Relief
The U.K. Committee for the Freedom from Hunger Campaign
The Save the Children Fund
Inter-Church Aid and Refugee Service
The United Nations Children's Fund

Numerous other organisations were to come to the notice of the children as the work developed, but with the amount of material subsequently collected and the time available for background reading, the decision to restrict the initial number proved wise.

In the beginning I wrote to the five organisations outlining the project and requesting as much material as possible, in the form of posters, booklets and pamphlets. I am indebted to all these organisations for the considerable help given; altogether some seventy different items of literature were obtained. I felt that I had received more assistance in these vital initial stages than individual children would have done. The booklets were then numbered for easy identification and inside each booklet or pamphlet, items of relevance to the various groups were marked to facilitate reading and note taking. The properties had been furnished. I then had to set the stage.

I began by introducing the topic to the whole fourth year, outlining the basic problems and the need for understanding and assistance. I was more than amazed and a little relieved to see the

interest displayed in the topic and by the end of the talk I was obliged to restrict questions and suggest that children find the answers for themselves later. I explained the way by which the work would be followed, to culminate in a final exhibition. I feel sure that at that time few could visualise what was meant by the term 'exhibition'.

At this juncture, in keeping with my policy in previous assignments, the children were allowed to select their group and individual topic, with no restriction on the composition of the groups other than that each group should consist of members from one class only. This was to facilitate organisation without upsetting timetable arrangement. This was the first occasion on which these children had done any important work in groups and it was for this reason that I did not try to separate friends as is often customary in more formal situations, particularly when they prove troublesome. They then began to read the relevant booklets and pamphlets.

In these initial stages when, perhaps, the less able could not see 'the wood for the trees', the children were helped considerably by the reference list of books, etc., and, more particularly, by the noted sections within the booklets. The success of the whole project depended on the speed and ability with which each child came to grips with his topic and on the creation of an immediate interest. Failure on the part of the less able children to make a good start could prove disastrous. I was fortunate that all the children came to me for History, for I was able to assist those who were finding difficulty in making a start. So far all the initial basic reading and note taking had been done in the History lessons. The time had come, however, to introduce other subjects into the work, for by now all the children had a clear idea of how to set about their work.

The introduction of other subjects into the project depended on the co-operation of the staff. Those concerned with the three fourth year classes had already agreed to assist, if only by allowing the children to get on with their project work in their lessons. From time to time various educationalists have emphasised the need to break down subject barriers, in the belief that all subjects contribute to one end and have the same ultimate educational

FAMINE	REFUGEES	HEALTH
GROUP 1—CLASS Z <i>A. Wilson</i> What are the problems? <i>A. Cottrell</i> Where does famine exist? <i>W. Short/E. Rodd</i> What is life like? <i>W. Openshaw</i> What can be done? ASIA	GROUP 2—CLASS Y <i>Frances Clark</i> Why are there refugees? <i>Sheila Mason</i> Where are there refugees? <i>Pauline Reardon</i> How do they live? <i>Hilary James</i> What is being done? GROUP 5—CLASS X <i>G. Taite</i> Where do refugees exist? <i>D. White</i> Why are there refugees? <i>D. Biggs</i> What is being done? <i>N. Curzon</i> How do refugees live? GROUP 8—CLASS Z <i>M. Taylor</i> Where do refugees exist? <i>A. Allen</i> Why are there refugees? <i>K. Thompson</i> How do refugees live? <i>S. Thomson</i> What is being done? GROUP 11—CLASS X <i>P. Rooke</i> What/where are the problems? <i>D. Green</i> How do the people live? What is being done?	GROUP 3—CLASS Z <i>C. Wong</i> What are the main diseases? <i>L. King</i> What are the causes? <i>L. Moloney</i> Which countries suffer? <i>S. Hislop</i> What is being done? GROUP 6—CLASS Y <i>Betty Adams</i> What/where are the problems? <i>Freda Moore</i> What is being done? GROUP 9—CLASS Z <i>S. Grey</i> Where do the problems exist? <i>K. Fenton</i> What are the causes? <i>D. Tate</i> What are the problems? <i>R. Jones</i> What is being done? GROUP 12—CLASS X <i>T. Eastham</i> What are the problems? <i>P. Jenkins</i> Where do they exist? <i>O. Wilson</i> What is being done?
GROUP 4—CLASS Z <i>A. Broune</i> Where does famine exist? <i>L. Miles</i> What are the causes? <i>F. Dunn</i> How do the people live? <i>R. Stokes</i> What is being done? EUROPE		
GROUP 7—CLASS Y <i>Pauline O'Grady</i> What are the problems? <i>Irene Gibbs</i> Which countries suffer? <i>Pat Quinn</i> How do the people live? <i>Brenda Dutton</i> What can be done? AFRICA		
GROUP 10—CLASS Y <i>Beryl Thompson</i> Where does famine exist? <i>Muriel Smiles</i> How can it be removed? <i>Susan Brennan</i> What are the problems? <i>Elsie Jones/Pat Casey</i> How do the people live? AMERICAS		
'WORLD ORGANISATIONS' GROUP 13—CLASS X <i>Sandra Walton</i> F.A.O. <i>Mavis Sheppard</i> Inter-Church Aid and Refugee Service <i>K. Murphy</i> Save the Children Fund <i>Barbara Doyle</i> OXFAM. <i>Sheila Patterson</i> U.N.I.C.E.F.		'WORLD PANORAMA' GROUP 14—CLASS X <i>Brenda Smith/T. Garside</i> Refugees <i>Elsie Lang/Caroline Andrews</i> Famine <i>Jill Lincoln/Betty Slater</i> Health

Fig. 8. Groups and topics of all children in the fourth year.

values. This is particularly true in the education of average and below average children, for whom specialisation is unnecessary.

To assist both the children and the staff in what could so easily become an unwieldy project, I drew up guidance sheets, as shown in Figs. 9 and 10. It was not intended that children and staff should follow them rigidly, but rather that they should use them to help relate their work to the topic in question. All members of staff taking a fourth year class received a guidance sheet for the subject taken with that class.

At this point, with much of the initial reading and notes completed, it could be said that the project had replaced the many subjects on the timetable and the formal teaching involved. It was also noticeable that interest in the work had increased considerably and the further the work progressed the more engrossed every child became. It was most pleasing to see groups of children working steadily, some designing posters or maps, others planning

<i>Name</i>	<i>Class</i>	<i>Group No.</i>	<i>Region</i>	<i>Topic</i>
A. Wilson	Z	I	Asia	Famine

Reference Book Nos.: 1C, 1D, 1F, 1G, 2, 4, 5, 6C, 7A, 7B, 11, 15, 19, 23, 31, 43, 65, 3. Also see F.A.O. posters.

Outline of individual topic.	What are the food problems?
------------------------------	-----------------------------

Work in other subjects: N.B. If you borrow book, etc., for use in another room, please return it to Room 1 as soon as possible and make sure it is put in the correct folder.

Mathematics: Graph work. Study 1G, 3 (page 2), 3 (page 24), 43, 65.

English: 1. Continue with notes/reading/thesis, etc., from History.

2. Letter writing.

Art: Posters.

Geography: Map of Asia—show in your own way famine areas/particular problems.

History: Reading/notes/writing of individual thesis.

Domestic Science.

Woodwork: Models—perhaps show primitive agricultural machinery/irrigation.

Science: Food values—charts, etc.

Needlework.

Fig. 9. 'Guidance Sheet' given to each child, giving suggestions for work in each subject. I kept a master copy.

PROJECT WORK IN THE SECONDARY SCHOOL

Class Y—GEOGRAPHY Miss Thomas

All maps to be done on 2' x 2' card in appropriate colour, i.e. Famine—yellow, Health—red, Refugees—green.

GROUP 2—*Refugees in Asia*

- | | |
|-----------------|--|
| Frances Clark | Map of Asia—refugee areas coloured—blocks superimposed to give numbers and reasons for refugees. |
| Sheila Mason | Map of Asia—pictures showing conditions in various areas superimposed. |
| Pauline Reardon | Map of Asia—blocks giving details of help given by various organisations. |
| Hilary James | |

GROUP 6—*Health in Europe*

- | | |
|-------------|--|
| Betty Adams | Map of Europe—colour in countries with problems. Blocks superimposed to give diseases/numbers. |
| Freda Moore | Map of Europe—blocks to give details of help by organisations, etc. |

GROUP 7—*Famine in Africa*

- | | |
|-----------------|---|
| Brenda Dutton | Map of Africa—famine areas shown—blocks to give details of organisations helping, etc. |
| Irene Gibbs | Map of Africa—Famine areas shown—blocks to give details of causes, problems, number affected. |
| Pauline O'Grady | Map of Africa—pictures showing conditions superimposed. |
| Pat Quinn | |

GROUP 10—*Food Shortage in the Americas*

- | | |
|----------------|---|
| Susan Brennan | Map of Americas—areas affected coloured—details of famine given. |
| Beryl Thompson | |
| Muriel Smailes | Map of Americas—famine areas shown—blocks to give remedies, etc. |
| Elsie Jones | |
| Pat Casey | Map of Americas—pictures superimposed to show condition/effect on people. |

Fig. 10. 'Guidance Sheet' given to each member of staff taking a fourth year class, outlining the work of all class members in that particular subject.

graphs. In many cases the children were working quietly in the library or a vacant room without supervision, having reported at the beginning of each lesson to the teacher normally responsible for them. In this way each member of staff was able to help me by referring to his guidance sheet and ascertaining what each child was studying in his particular subject. In many cases they would assist any child who was finding difficulty.

As organiser I realised that I would have to act as the 'central

information bureau'. As such I frequently had to help individuals or groups to solve particular problems, or to arrange the outline of their written work, to suggest other sources of reference or to explain difficult passages. At this stage I was aware how unsure many of the children felt, as if they still doubted their own ability. It was obvious that with such a vast field to cover, children of lower ability would find certain difficulties. The limited reading ability of some of the children was one of the main problems. Four girls from Class Y and five boys from Class Z had been tested on Schonell's Graded Reading Vocabulary Test R₁ at the beginning of the year, when the average chronological age of this group of poor readers was 14.2 years. The resultant reading ages, ranging from 9.6 years to 13.1 years, give some indication of the problems to be faced. Fortunately the large quantity of booklets which had been obtained enabled me to select material of a suitable standard and with appropriate guidance the way became clearer for these children. Much remained to be done, however, before the final stages were reached.

3. Integration of Subjects

By the end of the first week of research the children had gained sufficient understanding of their topic to be able to incorporate other subjects in their thinking.

HISTORY

The main written work in the project was to be centred on a 'group booklet'. Each child, with his own particular topic to study, had started by reading as many of the suggested booklets as possible, before collating all relevant material. This was then used as the basis of the child's individual thesis, which was first written in rough and corrected for grammatical mistakes. This aspect of the work proved, perhaps, the most arduous from my point of view, for it meant a considerable amount of correction work in addition to other tasks.

When all had completed their notes, arrangements were made to copy them on to large pieces of card 20 inches $\times$ 12 inches, the colours of which depended on the topic. Thus all booklets

PROJECT WORK IN THE SECONDARY SCHOOL

on Health were to be made of red card, those on Famine and Refugees on yellow and green respectively, whilst the booklet on World Organisations was made in blue card. In view of the possibility of damage to such large pieces of card if carried from room to room, I decided to allow the children to write their cards at one and the same time, and use was made of two rooms. All but a few completed the work in one afternoon, using a suggested simplified form of handwriting and lettering to keep uniformity and facilitate reading.

As the purpose of the booklet, apart from its educational values, was to present a detailed, yet easy to read, background to the other work on show, it was suggested by one of the boys to write the cards under sectional or regional headings, as already practised in note work. The suggestion proved acceptable to the boys and girls, who felt it would make for easier reading in the exhibition.

On completion of the writing, each group selected its best artist to design a front cover, incorporating the title and the names of the group and eventually the cards were stapled together to form the group booklets. The standard of most booklets was enhanced by the excellent cover designs.

GEOGRAPHY

Geography, apart from enabling children to examine in detail the problems of food production, irrigation methods, etc., had an important part to play in presenting a clear pictorial impression. Each child, following the outline given on the guidance sheet, collected information in the early weeks with a view to designing maps which would show at a glance the main points to be conveyed. Most followed the pattern suggested and drew to scale maps of their continent on card 2 ft $\times$ 2 ft, with countries connected with the topic clearly shown. The manner in which details were shown was left to the children. Some printed relevant information in blocks set around the edges of the map, connected to the respective countries by arrows, coloured tapes or other ingenious methods. Some took the opportunity to use their imagination and either superimposed or inlaid the land mass on the card. Altogether the results were both original and appealing.

Those who at first found it difficult to enlarge the maps to scale, succeeded eventually through their own efforts.

MATHEMATICS

With so many facts and figures to be presented and comparisons to be drawn, it was obvious that the children could best achieve these ends in graph form. Throughout the early weeks of the project the children had been collecting information on which to base their graphs. Some followed the suggested topics on the guidance sheet, others decided to devise their own graphs. All found occasions to use mathematical processes involving area, weights and measures, money, ratios, fractions and graphs.

The results were most rewarding and every group had various graphs illustrating facts and figures and, in many cases, drawing comparisons between different countries and continents. Many boys and girls showed a flair for originality and utilised many different types of graph, as shown in Fig. 20.

ART

With posters and illustrations so much in demand, children were to be found at all times of the day in the Art room busily designing and painting items for the exhibition. Assisted by the Art teachers, whose co-operation and patience was most valuable, some outstanding posters were produced, depicting conditions in underdeveloped countries suffering from famine or disease, drawing comparisons between the fortunate and the unfortunate and appealing for assistance. It would be impossible, in fact, to do justice by giving examples.

As the weeks of preparation came to a close, each group made use of the many illustrations in the booklets, etc., to put on maps or illustrated posters.

WOODWORK

It was decided at an early stage in the project that each group should construct at least one model to illustrate some aspect of its research. With half of the groups made up entirely of girls it seemed likely that this aspect of the project would suffer. In this we were proved quite wrong. Armed with illustrations and

PROJECT WORK IN THE SECONDARY SCHOOL

'plans', girls and boys descended on the woodwork room during the lunch hour to begin their work. For three weeks the room was a scene of intense activity as, under guidance where necessary from the woodwork teachers, models of African villages, refugee camps, South American 'shanty' towns and items of agricultural machinery gradually took shape.

It would be unfair to discriminate between the various models, but perhaps the scene of 'Hong Kong Hill' as it became known, stood out if only for the meticulous care with which it was constructed. The two boys responsible spent many hours during lunch and playtime making over one hundred small shacks, complete with rope or bamboo ladders which clung precariously to the steep, crowded slopes of the hill. At the same time, however, there was an excellent model of a European refugee camp, in which doors were hinged and even the small water tap turned on and off, and a South American shanty village, impressive in its simplicity and stark reality.

Not to be outdone, the girls, overcoming the initial technical difficulties and paying little heed to minor cuts, were responsible for some equally fine models. The Congolese village, made out of cane and straw, and the Korean refugee centre immediately come to mind. In view of the fact that the models were made entirely of simple materials, such as cane, straw, sawdust, sand, sacking, papiermâché and waste pieces of wood and veneer, the high standard of the finished work was even more commendable.

Apart from the high standard of work achieved, one of the most rewarding aspects was the manner in which the boys were willing to assist the girls when they were faced by technical difficulties. Not all work was done in school; two girls, for example, preferred to make their models of cave dwellings in southern Italy at home. It was evident that interest in the project had gripped everyone.

SCIENCE

As the work on the project progressed the children were able to obtain more information about dietary deficiencies in the course of the normal Science lessons. These lessons embraced not only facts relating to famine, but also details of worldwide deficiencies

of proteins and vitamins and related diseases. Lessons also included comparisons between the calorific values of various foods and the average daily intake of calories in various countries. Likewise attention was paid to the problem of disease and a study was made of the causes of various diseases and experiments were conducted in the growth of bacteria.

With the help of this additional information boys and girls were able to prepare a number of charts and diagrams.

DOMESTIC SCIENCE

During the four weeks of preparation the girls were able to study the eating habits of various countries and to plan different meals in readiness for the opening of the exhibition, with the idea of emphasising the contrast between this country and the under-developed countries of Asia and Africa.

Plans were made to show three sample meals on each of the three days of the exhibition and groups of girls were chosen to prepare the meals each day. The three sample meals were intended to illustrate an average English dinner (potato, vegetables, meat and a sweet), a good Asian meal (boiled rice and a portion of boiled fish) and a meal common in many famine and refugee areas of Africa and Asia (leaves, seeds, straw, roots, bark and even mud).

NEEDLEWORK

In spite of the many other activities, the girls were able during the early weeks of reading to collect details and illustrations of dress in many areas of the world, with a particular emphasis on refugees. With this information they were able to dress figures made of clothes pegs and plasticine to present a picture of refugee dress throughout the world. If time had allowed, the work in this field could have been more ambitious but even in this limited form the work had an important part to play.

ENGLISH

No mention has yet been made of the part played, specifically, by English. It should be noted that without the co-operation of the

PROJECT WORK IN THE SECONDARY SCHOOL

English staff, much of the early reading and note writing could not have been accomplished within the allotted time.

In addition, the English lessons provided an excellent opportunity to encourage the children to obtain additional material by writing to the many organisations and countries connected with the work. In this respect the head of the English Department proved invaluable by displaying on large posters the addresses of the relief organisations and embassies and by making himself available to assist children in the general skills of letter writing. Altogether over a hundred letters were written, the majority to the various countries known to be receiving aid or possessing problems of health, famine or refugees. Unfortunately only a third of the countries contacted replied to the letters and several of these denied any knowledge of problems in their own countries. This attitude on the part of so many countries proved one of the most disappointing aspects of the work so far as the children were concerned. Some found it difficult to appreciate, and I had to explain that such attitudes could be governed by political reasons or national pride. The matter was later taken up by the Oxford Committee for Famine Relief who intended to make enquiries.

Efforts were also made to supplement the literature already available by contracting the Public Library. Unfortunately, despite a desire to co-operate, the Library, owing to lack of time and material on such topical questions, was only able to provide some dozen books. As I was to discover some several months later, this latter difficulty arose out of the fact that the school had started the project before the opening of the U.K. Freedom from Hunger campaign. In the months which followed a considerable amount of additional literature was made available by the various bodies and, in fact, the school was proud to have its project included in some of the literature.

English lessons had an additional opportunity to play a direct part in the project. Many children wrote their own poems depicting the problems in the world, whilst a small group wrote and staged a short play illustrating life in a refugee camp. The play was staged for several classes in the school, but because of the shortage of time for rehearsing it was decided not to put it on for the parents on the evenings when the exhibition was open.

It will be seen that every effort was made to include all subjects in the work. Even music had a part to play, for the children collected records of appropriate foreign music, some of which were played as background music on the days when the exhibition was open. In this way, therefore, it is fair to say that for the four week period the timetable as such was suspended for the fourth year. Throughout the period the children, having planned their work in advance, knew what they had to do and proceeded accordingly.

It was obvious that with the children allowed so much freedom, some kind of check was required. This was achieved in many ways, without in any way restricting the children. The guidance sheets provided members of staff with a means of knowing exactly what each child was supposed to be doing and usually, at the beginning of each lesson, the staff would make their quick check and then allow the children to proceed. In addition, I took the opportunity, as organiser, to keep in touch with every child and a progress chart was kept. In this way any inclination to waste time was discouraged, although it was soon obvious that the children would continue to work industriously even without supervision. Throughout the four week period, there were only two or three occasions when an individual child or group had to be reprimanded.

It was necessary from time to time to assist individual children over problems which occurred and which presented an obstacle to their progress. Thus I had to make myself available to assist children at all times, which naturally proved a tiring task when allied to my work with other classes. Not wishing to jeopardise the interests of my second and third year classes, I found myself, in fact, carrying a double obligation. Nevertheless, the work continued and by the end of four weeks the majority of the children had completed their tasks sufficiently to think of the next stage.

4. The Exhibition

All work was then collected, allowing the late finishers time to complete any items. With the assistance of several boys and girls every item of work was checked for possible spelling mistakes,

whilst I paid particular attention to the facts and figures. It was soon apparent that the weeks of careful preparation and research had proved worth while, for the maps, diagrams and written work were all of high standard. In cases where the work was spoilt by poor lettering, etc., improvements were made by a group of boys chosen for their ability in this kind of work.

Eventually all work was completed and, to my great satisfaction, I decided that every piece of work was good enough to display in the exhibition. My faith that these children, given a real incentive and a practical approach, could do work of a standard higher than normally expected, had been justified. In fact, it was impossible to distinguish between the various items, for practically every piece of work was of the same high standard, with certain reservations for those with a low reading ability.

Two days before the exhibition was due to open, work began on preparing the school library and the adjacent classroom, which at the time were the only two rooms available. Through the generosity of several local firms, I had been able to obtain a quantity of cardboard and hardboard. Under the supervision of the Woodwork staff, the framework for the fourteen stands needed for displaying the work of each of the groups was erected. Assisted by an 'army' of eager assistants the framework was then covered with cardboard and hardboard panels. Eventually all was ready for the exhibition work to be put on display under the various sectional headings.

The Consequences

1. Parental Response

The exhibition was open to the parents and general public for three days during school hours and for two evenings, with films supplied by various relief organisations shown to both the public and the rest of the school.

The attendance was, perhaps, a little disappointing for less than two hundred people viewed the exhibition. Several factors could have influenced this apparent lack of interest. First, Earle school, situated away from the main roads, was not in an ideal location, although press publicity on the first day should have

helped. At the same time the school, situated on the fringe of the city centre, had to struggle against the problem of parental apathy. Even those mothers who were working during the day preferred to by-pass the school in the evening on their way to the local bingo hall.

Many of the parents had already displayed their lack of interest in their children's education by frequently declining to attend school functions, including meetings concerned with future courses and employment opportunities for their sons and daughters. Many would fail to return forms expressing their own views on matters concerning their children's education. The attitude is not only common to the Earle neighbourhood, for J. B. Mays found a similar attitude during his survey in the neighbouring Crown Street area. More recently the Newsom Committee expressed the belief that most schools did make efforts to contact parents, but only a handful turn up for meetings. Thus, despite the efforts of the Earle children to attract their parents, the figures obtained from a survey conducted amongst the fourth year children illustrated their limited success.

Number of visitors who came as relatives and friends of fourth year children

19 children	had no visitors
15 children	had 1 visitor
14 children	had 2 visitors
4 children	had 3 visitors
2 children	had 4 visitors
1 child	had 6 visitors
1 child	had 11 visitors

Fig. 11. *Visitors to first project exhibition.*

The extent of parental interest is illustrated further by the fact that of the fifty-six children connected with the project, twenty-one stated that their parents had shown no interest at all in their work. Such apathy at home makes the high standard of work achieved by the children all the more commendable.

Depressing though the figures appear, they do represent considerable success on the part of the school. One factor which supports this is that forty-five of the children said that their parents had given either money or clothing to the school's col-

lections. In all the whole school contributed fifty-five guineas and twenty-one sacks of clothing for refugees in three days. These amounts do give some sign of success in reducing parental apathy, although some parents may have contributed without any real interest in the cause or the project. Nevertheless the limited success proved as satisfying as the commendation of those who attended.

2. Educational Benefits

There can be little doubt that the project proved a valuable incentive for the children, to such an extent that one tended to forget that they were due to leave school within six weeks.

The sensible manner in which the children, even the usually restless ones, settled to their work without the usual degree of supervision was most rewarding. Many had displayed qualities of industry and creativeness not always apparent in class work. Having been committed to an exhibition, the children realised that no one could be allowed to give up in face of difficulty. They had been motivated through contribution to and participation in an important and purposeful activity which, whilst demanding, had been structured according to each child's own capabilities. In this way no child found himself unable to proceed with his work.

As far as the fourth year children at Earle were concerned, this was one of the main benefits derived from the project, for so often in the school, children had shown little confidence in their own ability. On this occasion it was a case of *possunt quia posse videntur*—they can because they think they can. In the survey conducted after the project, all except two of the children stated that they had not realised that they could accomplish such good work. The benefits obtained from group work, since considered so valuable by the Newsom Committee, were also apparent. Each group produced at least one leader who undertook the responsibility of ensuring that the work was kept up to standard. It was obvious from an early stage that any 'weak' members of a group were being guided and assisted by their more able friends. At the same time, it did not mean that the less able group members made no contribution. In effect all that happened was that the more able

children took the place of the teacher in guiding their group members. As the Newsom Committee stated: 'The individuality of experience can happily be combined with a group project in which the weaker learn from the abler.'⁵ The eventual result was that all the work, with slight allowances for extreme differences of ability, was of the highest standard and many of the 'C' stream children produced work of a higher standard than the 'A' and 'B' children. This represented another rewarding feature of the project and illustrated that children, whatever the grading imposed on them, could achieve a higher level of work when placed in a stimulating environment. Many educationalists have quoted similar experiences as evidence of the dangers involved in labelling children according to intelligence quotients and streams. Whatever I.Q. is put on a person, it is no indication of what that person can do under certain circumstances. A. W. Rowe, author of *The Education of the Average Child*, realised the limitations of classification and made each child his own measuring rod rather than compare them according to I.Q. These views have since been echoed in the Crowther Report, which stated that those who did best in the Duke of Edinburgh's Award scheme were not always the most intelligent.

A criticism frequently levelled against the Project Method is that children do not learn as much as in the more formal teaching situations. This may be true if one is concerned merely with the learning of facts, as often happens in many examination courses, but as Fichte said: 'To excite the self activity of the pupil in a suitable province is the chef d'œuvre of the teacher's art. Knowledge comes as a by-product and inevitable consequence.' It is interesting, in this respect, to note the views of the children at Earle. All agreed that they had learnt much with regard to the value and uses of graphs, the need for clear colouring and lettering on maps and the technique of compiling notes from many different sources.

⁵ Central Advisory Council for Education, *Half Our Future* (Newsom Report), 1963, p. 129. Compare also the satisfaction of psychological needs in, C. M. Fleming, *Teaching: A Psychological Analysis*, 1958, Fig. 1, p. 33. J. E. Richardson in C. M. Fleming (ed.), *Studies in the Social Psychology of Adolescence*, 1951.

PROJECT WORK IN THE SECONDARY SCHOOL

It is interesting to note that all who felt that woodwork had been instructive were girls. This could be due to the fact that many of the boys were anxious, in addition to making project models, to complete their tables, stools and other pieces of furniture before leaving school. The results of these findings, however, have led to a woodwork class for girls which has proved a great success.

Forty-three children felt that they had learned more through the Project Method than they would have done in formal lessons. This view could have been influenced by the practical nature of much of the work, which appealed to the majority of the children. In fact, of the thirteen who felt otherwise, twelve were from Class X, the equivalent of the 'A' stream. They were unable to establish their superiority, so evident in the more verbal academic work.

As many of the children's views were entirely subjective, I was interested to determine if they had learned and remembered anything from the project. Some four weeks after the exhibition I gave the fourth year a short test in which the children had to place ten countries on a map. The countries chosen were those which had been mentioned in relation to the project and which, I am sure, the children had seldom encountered previously. At the same time I gave the test to three third year classes of equivalent grading to the fourth year ones. The children in the third year classes had played no direct part in the project, but had enjoyed the opportunity to view the exhibition.

<i>Classes</i>	<i>'A'</i>	<i>'B'</i>	<i>'C'</i>	<i>Average of year</i>
3rd Year	4	3	1	2.7
4th Year	8	7	5	6.7

Fig. 12. *Average class marks for map test (maximum 10).*

In addition to this short test, all fourth year children had to answer a question based on their project work in the terminal examination in History. In general the standard of the answers was most satisfactory and, out of a possible 20 marks for that particular question, the average for the whole group was 13, representing the highest mark for any question on the paper. This was achieved despite the fact that the question on the project work was one of only two compulsory questions, but at the same

time it must be remembered that this was the most recent work done by the children prior to the examinations.

The benefits derived from the project through the integration of so many subjects were considerable, as shown when evaluated in the twelve-point list of curriculum objectives set out by Nisbet in his book.⁶

Skills X	Cultural X	Home X	Occupation	Leisure X	Citizen- ship X
Physical	Aesthetic X	Social X	Spiritual X	Intellectual X	Moral X

The Newsom Committee stressed that separate lessons and subjects were single pieces of a mosaic. What mattered most was the pattern they made when put together, for all knowledge is a whole. The interrelation of so many subjects created a reality and purpose, so often missing in the vacuum of isolated subjects. This reality was to prove one of the major factors in the success of the project, for it set a standard. In more formal work children acquired a principle and applied it, but in the informal work of the project method they came into contact with the application and then discovered the principle. Although this may not be entirely true in the case of the fourth year, for some had learned the principles of map work and graph constructions in earlier years, many had nevertheless been obliged to revise and master those principles. What was more important was that the application was not artificial, as so often happens in more formal teaching. Under the Project Method the principles were the means to an end and not ends in themselves. It is interesting in this respect to compare the views of the Newsom Committee concerning the practical and realistic ways in which various subjects on the curriculum could be taught.

The success of a project, involving such a variety of subjects, depended on the co-operation of the specialist teachers. For this reason alone, such a project is relatively more difficult to organise than one conducted by an individual teacher in subjects for which he is responsible. On this occasion the project called for the co-

⁶ S. Nisbet. *Purpose in the Curriculum*, 1957, p. 160.

PROJECT WORK IN THE SECONDARY SCHOOL

operation of some sixteen members of staff. Each could have insisted on following his own lines of development with those children whom he took for a particular subject. I remember an excellent project at a Secondary Modern boys' school in Liverpool, in which each class teacher undertook to cover aspects of one Commonwealth country. The final exhibition contained a variety of studies, representing different treatment and presentation. In the case of the Earle project, however, my colleagues had agreed that to treat the work in this manner could have resulted in a lack of cohesion.

Having undertaken to organise the project, I was fortunate that members of staff were, in fact, so co-operative and willing as to accept the programme decided upon after consultation. In retrospect all have agreed that in a project of such width, it is essential that there should be one person responsible for overall organisation, able to bring purpose and unity to the various aspects of the work for both children and staff. Despite the co-operative attitude of the staff, I was pleased that the original seeds had been sown by the school's H.M.I. It is possible that staff were more ready to co-operate and accept the disturbances inflicted upon them in view of the fact that an H.M.I. had suggested the research. This method of instigating new ideas could be an invaluable part of an inspector's role, particularly in schools where staff or head teacher could not otherwise devise new approaches due to a lack of co-operation.

Even allowing for the success of the project, further projects of such intensity should not be undertaken too often in a year. In fact frequent integrated projects are not necessary for, as already suggested in earlier chapters, much valuable work can be done in single subject projects on an individual or group basis. At the same time, despite the advantages to be derived from project work, it does not mean that all work should be conducted through this one method. Such slavish addiction could do much to destroy the novelty of the Project Method. Nisbet stressed that all should have the benefit of a project, but not all the time. There is much to be said for this, lest the interest and zeal shown by staff and children alike might not be maintained in subsequent projects. The time allotted to any project can only be determined by the

extent of the study and will, in turn, determine the frequency of further projects.

The children displayed in various ways how much interest had been created by the project. Disciplinary action, as explained in the previous chapter, had proved hardly necessary. The majority of the children had shown qualities of industry and self-discipline which, in many cases, confounded the staff. Boys and girls who had frequently presented discipline problems in the formal atmosphere improved so much in general behaviour and attitude that many left school with better testimonials than they could ever have hoped for. The newly acquired freedom to move about the school and to work without supervision was seldom violated. I know that my headmaster, although he never said so, was dubious as to the wisdom of allowing such freedom of movement and was often to be seen anxiously standing in his doorway, as if expecting some violation of the freedom. His satisfaction, shown at the end of the project, was sufficient evidence for my own part of the success of this aspect of the experiment and strengthened my belief that passivity often precludes activity. Under the formal atmosphere of traditional classroom teaching 'labour' is not necessarily *opus*. Restricted physical movement in the traditional, formal school often restricts other desirable freedom.

The amount of interest created was also illustrated by the fact that so many children voluntarily did some of their project work at home. This was a most rewarding aspect and emphasised the success of earlier projects when children had similarly taken work home, although it was still unusual for children to do homework in normal circumstances. This satisfactory result could be due to the nature of the work. The practical tasks and research demanded of the children proved far more interesting than the normal pattern of homework. The evidence of this and previous projects suggests that the Newsom Committee's recommendation, that homework of a practical nature should be set for average children, is well founded. Both Newsom and A. W. Rowe hold the view that project work proves so interesting that homework suggests itself, a view amply supported by the Earle project.

Although these changes of attitude were indicative of the interest, the real impact of the project was effectively demon-

strated by the improvement shown in attendance figures for the weeks occupied by the project.

In an area such as that in which Earle School is situated, there is a continuous struggle against absenteeism. The many absences are not always due to illness, but to a variety of other factors including a lack of parental control and apathy on the part of some children towards school or the demands made on many children to do household chores or look after younger brothers and sisters whilst mothers go out to work.

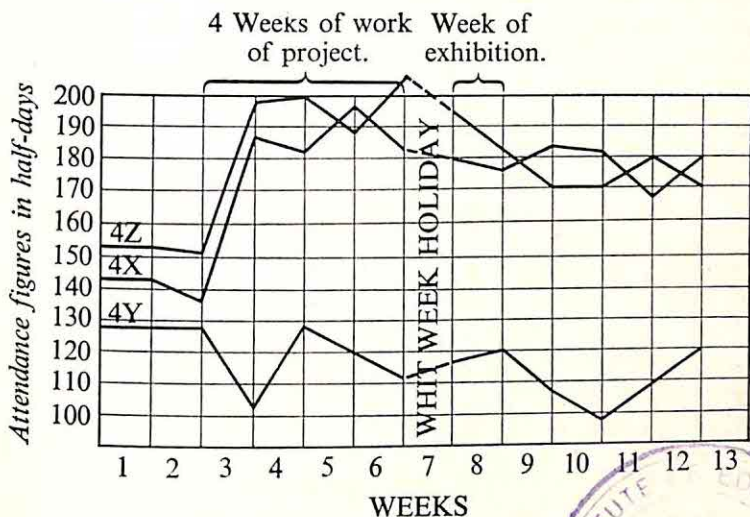
The problem of attendance, which is more serious in the third and fourth years as shown in the previous chapter, is more widespread than one would think. In the survey conducted by the Newsom Committee, it was found that most children with poor attendance began truancy in the third year of school life rather than in the first and second years and that it stemmed from a lack of interest in school work. This conclusion, based on surveys in a representative sample of Modern and Comprehensive schools, is borne out by the pattern of attendance at Earle, although it has already been shown that the attendance of the fourth year children had continued to decline since the first year.⁷

In the light of this pattern, the influence of the project on attendance presents a most heartening picture.

Figure 13 shows the fluctuations in the attendance of the three fourth year classes (X, Y and Z) during the whole of the summer term. It is interesting to note that attendance for the most part was at its height during the four weeks of the actual project work, apart from that of the girls' class (Y). It could be argued that the attendance in the later weeks of the term was seriously affected by family holidays, but in fact only two children were withdrawn for holiday reasons in the last four weeks of term; one for a week, the other for two weeks. Counterbalancing these absences was the desire of most fourth year leavers to be present in their last weeks at school, believing that a good attendance in these final weeks would influence the headmaster when writing testimonials. In any case the questions concerning attendance after the project do

⁷ Figures obtained from a selection of Merseyside Secondary Modern and Comprehensive schools showed the same pattern of declining attendances over the four years.

not alter the fact that the attendance records of classes X and Z were at their lowest at the beginning of the term.



Class X	200
Class Z	210
Class Y	150

(Max. weekly attendance possible)

Fig. 13. Fourth year attendance record during summer term, 1962.

In Fig. 14 the total fourth year attendance, out of a maximum of 560 possible attendances per week, shows the overall tendency to be at its peak during the weeks of the project work.

The decline in fourth year attendance figures over the three previous years has already been illustrated in Chapter 3. The addition of the attendance figures for the summer term completes the pattern for that age group throughout its four years at Earle and enables the full impact of the project to be appreciated. See Fig. 15.

In the light of these figures it would be reasonable to assume that the increase in attendance during the project weeks was influenced partly, even if not wholly, by the increased interest

PROJECT WORK IN THE SECONDARY SCHOOL

aroused in the children. As an additional source of proof I asked the children if their interest in school had been increased and had influenced their attendance. The answers confirmed the picture painted by the attendance statistics.

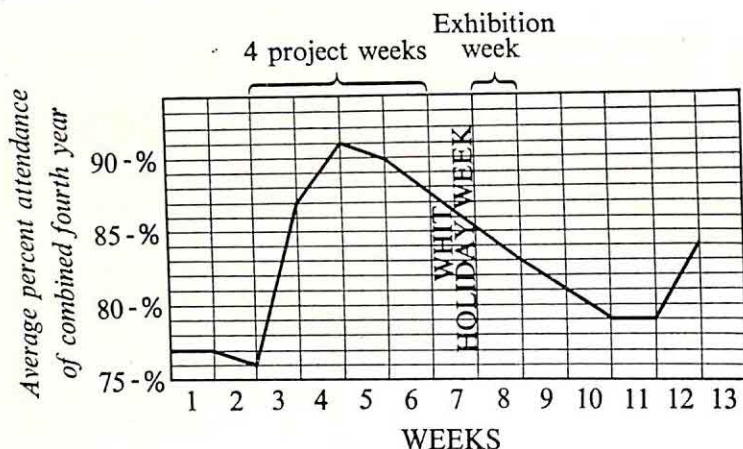


Fig. 14. Percentage weekly attendances of combined fourth year during summer term.

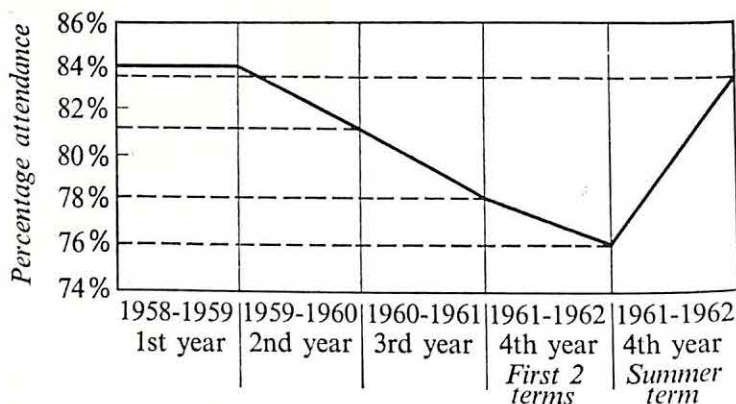


Fig. 15. Pattern of the fourth year age group's attendance over four years.

Apart from the educational benefits derived from the project, there can be no doubt that the children developed a greater understanding of the threefold problem facing the world. On many occasions girls and boys were obviously shaken by the facts

regarding suffering and disease in the world. Such sympathy was not restricted, as one might expect, entirely to the girls. Many boys were genuinely affected. One of the strongest and biggest boys in the school came into my room one day, obviously quite upset, and after showing me a picture of a child suffering from malnutrition said, 'Just look at this, Sir. Why can't we do something about it?' I told him that by making the exhibition a success and by creating interest and sympathy amongst all who attended, we would be doing something. I feel sure that all the fourth year children did their best to achieve this.

	YES	NO
Did the project make school more interesting?	54	2
Did the work make you keener to attend school?	49	7

Fig. 16. *Children's attitudes to school.*

The manner in which many boys and girls spent time in the evening collecting money and clothes was a reflection on their enthusiasm, although on occasions the school had to restrain the more ambitious collectors lest they contravened local bye-laws. One girl, who lived near a theatre now given over to bingo, wanted permission to collect from those who queued outside. On being advised that it was illegal, she retorted, 'They can afford it'.

I feel sure that Earle School has enabled many of the fourth year children to go into the world with more understanding of the many problems. As the remainder of the school assisted in collecting money and clothes and had the opportunity to view the exhibition, I hope that the number will be considerably more.

3. An Extension of the Work

In view of the limited time remaining after the exhibition, the fourth year children did not have as much opportunity as I would have wished to make use of their work. It was essential that, having concentrated for so long on their group and individual topics, all should have an opportunity to study the work of other

PROJECT WORK IN THE SECONDARY SCHOOL

groups and see it as a whole. To help to achieve this each group presented a summary of its findings to the others.

Even though the fourth year might not have had an opportunity to extend its work to the full, other classes in the school did. Having viewed with interest and curiosity the activities of the past weeks, the rest of the school enjoyed the opportunity to study the work displayed in the exhibition and many classes developed aspects of the work to form the basis of discussions and further work of their own. Several classes took the opportunity to write and perform playlets of their own.

In view of the interest created in this worthy cause, it was essential that the school should follow up and consolidate the work in future years. This has been achieved and collections have been taken weekly at such a generous rate that the school has been able to adopt the Nam Duen school on Lamma Island, Hong Kong, with whom we have established correspondence links.

The continued interest has been encouraged by the remarkable impact which the project has made locally, nationally and even internationally. The opening of the United Kingdom Campaign for Freedom from Hunger in the month after the Earle project saw many more organisations and individuals taking a keener interest in the cause. Following a visit by the Schools' Advisor of Oxfam, who had proved so helpful in providing material, I was encouraged to write an article for *The Times Educational Supplement*.⁸ Oxfam then had 5,000 copies of the article printed for distribution to schools and colleges throughout the country.

At the same time the U.K. Committee for the Freedom from Hunger Campaign had shown an interest in the work and a description was written for a *Study Projects Guide*, which was published in May 1963. And in the March 1963 edition of the monthly booklet *News*, issued by the Food and Agricultural Organisation, Mrs Stella Dyer wrote of the Earle Project:

It has been found that it isn't necessary to be brilliant to understand the Campaign. One of the best exhibitions and research projects of which I know was produced in an old school building, in a discouraging setting, where pupils who were about to leave school found that

⁸ 'The Story of an Exhibition', *The Times Educational Supplement*, 4 January 1963.

their last weeks suddenly meant more than ever before because they were concentrating on other people's problems.

In addition to these articles, many requests have been made to display the exhibition and talk on the methods used. These requests have been made both by relief organisations and educational organisations and requests are still being received, although the project was conducted as long ago as June 1962. The many requests have made all associated with the project very proud, my only regret being that so many of the children who were responsible for the work have long since left school. In view of the many varied engagements, it might, perhaps, be easier to list them chronologically:

July 1962. Displayed by War on Want Committee in an exhibition in Liverpool.

September 29. Talk and display for the S.W. England F.F.H. Educational Conference in Bristol.⁹

October 24. Displayed by the United Nations Association at a meeting in Liverpool.

November 8. Talk and display at Chorley Day Training College, Lancashire.

November 28. Talk and display at Holt Green Schools, Aughton, Lancashire.

January 17, 1963. Talk and display at St Katharine's Training College, Liverpool.

March 27. Talk and display at Maghull Grammar School, Lancashire.

April 11-16. Display at H.M. Prison (Walton), Liverpool.

July 18-20. Display in Educational Tent, Liverpool Show.

December 12, 1964. Lecture and Display at Burton Manor, Cheshire.

These invitations have set a worthy seal on the school's efforts and have enabled the children's work to have a far greater

⁹ 'Teachers and War on Famine', *Bristol Evening Post*, 29 September 1962. 'An exhibition at the Reception Room of Bristol University today brings home far more successfully than any speech, the need to fight world hunger.'

PROJECT WORK IN THE SECONDARY SCHOOL

influence than was even anticipated when the project was undertaken. The display at Walton Prison made a tremendous impression on the prisoners and, according to the Deputy-Governor, was largely instrumental in a collection of £23, which represented a fine achievement considering the limited resources of the prisoners. Similarly the talk and display at Maghull Grammar School encouraged the boys and girls to make a collection which realised £117.

From an educational aspect, the many displays and articles have encouraged other schools and students to attempt similar studies, which could do much to develop a greater understanding of world problems amongst schoolchildren. At the same time teachers have been encouraged to make more use of the Project Method and I can recall the comment of one elderly teacher at Bristol who decided to utilise the Method again, after having abandoned it some years ago. A more recent example of the impact made by the project came when a student teacher from Chorley Day Training College, who had remembered the exhibition at the college over a year ago, motored some sixty miles to obtain more details from me, so that he could undertake similar work on his final teaching practice. In a similar vein, the second project, later undertaken in co-operation with a group of students from St Katharine's Training College, arose out of this first major project.

The culminating tribute, as far as the children at Earle were concerned, came when the school was selected by Oxfam to be featured in an I.T.V. 'World in Action' programme commemorating the twenty-first anniversary of Oxfam's foundation. One can imagine the excitement shown by the children when the production team spent a day in the school filming the exhibition material and using several children to re-enact the original project work. The programme was shown on 7 October 1963, and within two days the school had received over £80 as contributions to Oxfam from people far and wide. The television programme afforded all those children who had actually produced the exhibition the opportunity to appreciate the success of their work.

Thus in more ways than one the project had produced re-

warding results. One could hardly expect such results from all projects, but it would prove interesting to see if the more rewarding aspects of the first project could be repeated in others. Further success could help to confirm the value of project work in the secondary school.



The Second Earle Project

‘ASPECTS OF THE SOCIAL SERVICES’

The invitation to take part in a second project came during the following school year, when it was suggested that the school might co-operate with St Katharine's College, Liverpool, to give six first-year student teachers an opportunity to experience project work.

After discussion with the Biology tutor, it was decided that the project should be based on a study of certain aspects of the Social Services, which could be linked with the students' own work in Biology. By allowing each of the students to have charge of a small group of children, it was hoped that they would gain experience which would be of value when they came to undertake their first teaching practice.

The staff at Earle agreed that, since the previous fourth year children had gained so much benefit from the first project, their successors should have a similar opportunity. The children in the fourth year were similar in many ways to their immediate predecessors. Only six of the children intended to stay at school for a fifth year with a view to taking an external examination. The others were to leave school at one of the three leaving dates during their fourth year.

Of the four classes in the fourth year, only the ‘A’ stream contained a majority of children who showed a real interest in their work. The other three streams presented a very varied picture. The mixed ‘B’ stream (4Y) contained many children of average ability, but most lacked sufficient interest and motivation to make any real effort in their work. As a third year class it had presented many problems to the staff and the children entered the fourth year anxiously waiting their turn to leave school. This same attitude was to be found amongst the children of the two ‘C’

streams (4S Boys, 4W Girls). Their limited ability made the task of teaching even more demanding.

The pattern of attendance of this age group during the previous years in school showed the same trend as that seen in the preceding fourth year group. The home environment of the children was also similar. One girl in 4Y was keeping home for her father and six brothers and sisters, of whom only one was older than herself. Many of the boys in the 'B' and 'C' streams had criminal records, and at least eight were at that time being supervised under the terms of a probation order.

It was decided that the 'B' stream should participate in the group project, in the hope that the work would help to bring about a change in the attitude and standard of behaviour of the pupils and that the mixed class would give more scope to the topics envisaged.

Each of the students was responsible for a group, which studied one aspect of the social services. The six aspects were selected after discussion between the College tutor, on behalf of the students, and several of the Earle staff. The children were allowed, as far as practicable, to select the topic they wished to study and to form their own groupings. The final arrangements were as follows:

- | | | |
|----------|--|---------|
| Group 1. | The Water Supply | 4 boys |
| Group 2. | Food Hygiene | 4 girls |
| Group 3. | Refuse Collection and Disposal | 4 boys |
| Group 4. | Sewerage and Sewage Disposal | 4 boys |
| Group 5. | Public Health (including clinics, home nursing, home helps, care in the home, common illnesses and care) | 6 girls |
| Group 6. | Public Health (including rodent control, smoke control, Port Health Authority, control of infectious diseases, etc.) | 4 boys |

The students spent six successive Wednesday afternoons in school, when they discussed the work done by the children and suggested further lines of study for each child, whose own work would eventually form part of a group's study. In addition to this work, many of the groups paid visits with their student leaders to

places connected with their studies or listened to visiting speakers. During the six weeks, visits were made to an abattoir, sewage farm, several controlled refuse tips and various medical and health museums. Talks on relevant topics were given by four visiting speakers.

It was intended that the work set by the students should not only be sufficient to keep the children busy in school for the remainder of the week, but to encourage them to continue their work after school in a variety of ways, including personal surveys, visits, reading and both written and practical work. The specialist teachers again allowed the children to continue with the set project work instead of following the normal syllabus.

Each child received from his student a weekly 'Work Sheet' which gave suggestions as to possible further work. The problem, however, was to ensure that progress was maintained in the students' absence. To this end, I undertook to issue each member of staff with a 'Guidance Sheet' outlining the work for each child, as suggested by the student. Thus, without restricting the freedom of the child, the 'Guidance Sheet' allowed individual members of staff to check the progress of the various groups and assist whenever required. In addition I made myself available at all times, as in the first project, to answer questions and help in solving problems. In this way I was able to ensure that the work set by the students was completed and, on occasions, supplemented. The first project had shown the need to have at least one member of staff directly responsible for overall control and on this occasion, with the group leaders absent for nine-tenths of the week, it was even more essential.

Whilst 4Y was studying the topics in groups, it was agreed that the experiment should be extended to allow the remainder of the fourth year children, who were most envious of 4Y, to study all the topics under more formal conditions. I offered to give the three classes, 4X, 4S and 4W an introductory lesson covering the general historical/geographical aspects of each topic. By using one of the larger rooms in the school I was able to give these talks to all three classes at the same time, making use of as much visual material as was available. Other 'specialist' teachers offered to supplement the talks by discussing with these classes aspects of

1st Week

What is refuse? Why collected?
Conditions in earlier times when refuse thrown into streets.
Brief account of 'History of Refuse Collection'—1936 Public Health Act.
Danger of non-collection of refuse. Need for clean bins, etc.

2nd Week

The dustmen—hours, wages, clothing, how organised.
Refuse collection—frequency of collection, methods of storage (disposable bags, etc.), trade refuse, amounts.
Type of refuse vehicles—link with historical background.
Talk by two dustmen.

3rd Week

Methods of disposal available—burning, tipping at sea, salvaging of waste material, controlled tipping.
The advantages/disadvantages of the various methods—cost, etc.
The method of controlled tipping as practised by Liverpool.
The uses made of controlled tipping in Liverpool—Otterspool Promenade and reclaimed land.
Childwall Playing Fields, Sefton Meadows—raising level of agricultural land.

4th Week

Visit to Childwall controlled tip.
Talk by official from City Engineer and Surveyor's Department.
Discussion of methods of controlled tipping.
Need to prevent disease and rat infestation.

5th Week

Trip to Otterspool Promenade—followed by discussion and record of trip.
Methods of refuse disposal in other countries.
Possible future developments.

6th Week

Completion of work—general discussion, etc.

Fig. 17. Scheme of work prepared by student in charge of group studying Refuse Collection and Disposal. A more detailed copy, outlining the topics to be covered by individual children, was issued to the staff in the form of a 'Guidance Sheet', and the children in the form of a weekly 'Work Sheet'. This scheme gave opportunity for work in many subjects, both of a practical and non-practical nature.

the topics relevant to their subject. In this way the children appreciated the interrelationship between subjects. The children were then given topics in many subjects for further individual research. Those teachers whose subjects had nothing to offer the project agreed to allow children to continue their individual assignments. This extra time meant that the five topics (the two Public Health topics were combined) could be covered in the six weeks. Once again, for administrative reasons, the children moved from lesson to lesson in accordance with the timetable arrangements, but in practice they enjoyed the freedom, so essential in project work, to follow their own tasks.

With so many boys and girls involved again, it was essential that I, as organiser, should act as the liaison between the staff and children. In order to achieve this, I again provided each member of staff with a Guidance Sheet outlining the proposed order in which topics would be studied and giving suggestions as to the scope of the research.

The Guidance Sheets issued to members of staff assisting both the group and individual projects contained lists of reference books, charts, maps, pamphlets and diagrams which had been obtained from a variety of sources. This material was, in turn, made available to the children and formed the basis of their own research. Once launched on their work, the children sought their own information both in and out of school. Although, due to staffing difficulties, it was not possible for every child doing individual work to go on a visit, all the fourth year were able to listen to the visiting speakers invited by 4Y. In this way further information was made available to those engaged in their own research.

In their different ways the children in both projects continued to integrate the various subjects to a single end. The work done by the boys and girls developed according to their own ability, interests and effort. Some decided to concentrate on one aspect whilst others developed their work along other lines. Those with an artistic flair made full use of diagrams, sketches, maps, etc., whilst those with practical ability turned to models to illustrate their findings.

Work in the various subjects included the following items:

HISTORY

Historical background, showing conditions in earlier times and the development of the Social Services.

GEOGRAPHY

Geographical factors involved (climate, relief, etc.). Conditions in other parts of the world. Opportunity for maps, charts and models.

MATHEMATICS

Opportunities to relate mathematical processes to topics under examination and to utilise different methods of illustration. Work included graphs, volume, area, percentages, weights and measures, costing and problem work related to rate of flow, rainfall, water consumption, incidence of various diseases, atmospheric pollution, refuse, etc.

GENERAL SCIENCE/BIOLOGY

Methods and principles involved in water purification, pumping, growth of bacteria, sewage processing, cause and prevention of disease, expansion of ice, etc.

DOMESTIC SCIENCE/HOUSECRAFT

Food Hygiene, Vitamin and Protein values, Health in the Home, Shops and Factories, etc.

ART/WOODWORK

Posters, charts, models, etc.

ENGLISH

Provided opportunity for reading, notes, letter writing, writing of group/individual booklets.

The progress of the work followed much the same pattern as in the first project. Apart from some excellent posters and charts, the model of a sewage farm made by two 'C' girls caught the eye by its intricate details, whilst other girls from this class made a model of a Tudor town, illustrating the need for social services in that age.

Eventually the work was completed and prepared for a display,

in which all but two children had material. These two had worked well throughout the project but in the last week one lost his work through damage at home at the hands of a younger sister whilst the other could only blame himself for upsetting a whole bottle of ink over all but a few items. Nevertheless their work had been done, and some consolation was gained by making the lettered headings for the display.

In assessing the results of this twin project, it was inevitable that a comparison would be made with the first one, which had proved so successful. In some ways a comparison provided one method of objective assessment, but it would be wrong to place too much emphasis on this method due to the different conditions which prevailed.

It would be readily acknowledged by those concerned with both projects that the subject of this second project made less emotional impact on the children than did the study of world problems. As a result the children were not so emotionally involved in their work.

Another important factor was that the group project was conducted by first-year students who were experiencing project work for the first time. Their task was made more difficult by the fact that they had to establish a relationship with the children on one afternoon per week and to organise a project which was largely conducted in their absence by members of staff.

If these reservations are borne in mind, the results of this project compare favourably with the first.

Questionnaires given to the children after the project gave some indication as to its success. Just less than half of the parents had taken an interest in the project work, which was a considerable increase over the number interested in ordinary school work done by their children. Many of the children stated that their mother or father had given them assistance on problems connected with the project. Two mothers of girls in 4Y told me some time later that they wished the girls could do another project as they had noticed how interested their daughters had been. Despite this evidence of increasing parental interest, few came to view the work in the display, which proved of tremendous incentive and interest value to the children involved.

The main educational benefits derived from the second project were very similar to those in the first, namely that the majority of children displayed more interest, imagination and industry and became so actively involved in the work that behaviour improved considerably. This was demonstrated by the number who were to be found working without constant supervision. Some of the best models and booklets were made by children who previously achieved little of note.

The project had considerable influence on the amount of reading. Many children joined the local library specifically to obtain information, whilst more than usual utilised the school library, as is shown in Fig. 18. School librarians would welcome such an increase in the number of pupils using their libraries, especially in the fourth year.

	GROUPS		INDIVIDUALS	
	<i>Before project</i>	<i>During project</i>	<i>Before project</i>	<i>During project</i>
% using Public Library for non-fiction.	30%	55%	26%	60%
% using School Library for non-fiction.	50%	85%	35%	65%

Fig. 18. *Influence of project on reading habits.*

It was also apparent from the early stages that many children were doing work at home. Even though the number in 4W was lower than in other classes, it represented a significant success.

	'A'	'B'	'C'	'C'
	4X	4Y	4S (Boys)	4W (Girls)
Number who had done homework in the third and fourth year prior to project	All	9	0	0
Number who did project work at home	All	All	16	9
Number in class	22	26	20	19

Fig. 19. *Influence of project on homework habits.*

Over 75 per cent of the children believed that the project had been more interesting than normal school work. An examination of the attendance figures for the term showed that all four classes showed a higher attendance during the six weeks of the project than during the remainder of the term, the largest increases being made by the two 'C' streams and the smallest by the 'A' stream whose attendance figures were usually quite high. The improvement in attendance was not as marked as in the first project but it should be remembered that the attendance of the whole school was seriously affected by the intense cold spell experienced that winter, a situation hardly improved by the failure of the school boilers for several weeks.

An effort was made to assess how much the children had learned from the work. By testing both before and after the project it was apparent that they had gained a considerable amount of information and a wider understanding of the social services than before. It was difficult to give the groups in 4Y an objective test due to the different topics, so after the work had been completed each group prepared, without reference to notes, a report on its findings. These reports, to which every child contributed, were read to the whole class and recorded on tape. They enabled me to assess the knowledge of each child and served as an additional means of consolidation.

It is difficult to make a comparison between the merits of the group and individual projects due to the different conditions under which the children worked and the variations of their ability, etc. Nevertheless the social influence of the groups acted as a stimulus to the children who tended to fall behind in their work, whereas those doing individual work had no such stimulus other than their own determination and interest in the subject, together with the goal of a finished booklet for display in an exhibition.

The fact that the 'C' classes showed the largest percentage increase in attendance might indicate that the introduction of a more informal project atmosphere proved a greater incentive to them than to the 'A' children. Although the 'A' class was quite satisfied doing individual topics, there were many in the 'C' classes who expressed a desire to do a group project. It is possible

that, based on the success of group work in this and the previous project, the children in the 'C' classes might have done even better.

It was intended that apart from the immediate benefits, the study of the social services should provide a training for citizenship. It is to be hoped that in later years these same children would ensure that water was not wasted needlessly, food was stored and served under hygienic conditions and refuse bins were kept in a reasonable state. It is hoped that they will appreciate the value and scope of the services and how they relate to everyday life at home and at work.

In an assessment of the educational benefits it would be wrong to overlook the six student teachers. In spite of the limitations imposed by the College timetable, they all expressed their pleasure at having had the opportunity to experience project work. Their tutor believed that the students had benefited not only from this experience, but also from the close work with a small group of children. They had been able to appreciate the importance of individual differences in ability, interests, aptitudes and personality and the influence of social background. This practical experience would help to substantiate theoretical work done in college and prepare them for the teaching practices later in their course. If more time had been available I feel sure that the benefits would have been even greater. One way to overcome this problem would be to attach groups of students to a school for the three years, during which time they could assist in all school activities, including projects, during any free time. In this way they could be of service to the schools and gain much valuable experience.

The project work was extended the following term when a group of the children visited Lake Vyrnwy, one of the city's reservoirs, whilst staying at Colomendy Camp School in North Wales. The party visited the pumping station and filter beds and photographs taken on the trip were later developed by the school's Photographic Society. The children also studied the sewage farm serving the camp and substantiated knowledge gained during the project. During this summer term the work was extended further by a series of lessons on local government and a

visit to the Town Hall and Council Chamber. Finally, as with the first project, the school was invited to display the work at the annual Liverpool Show. During the show a large number of boys and girls, some of whom had left school at Easter, came to view their work.

Thus much that had proved rewarding on the first project was repeated in varying degrees in the second. In some ways it was not as successful, but to offset this it contained many additional features which enhanced its value. Project work would lose much of its value if the results could be determined in advance. The very nature of project work, whether group or individual, is dynamic and reflects the children's own variations. The second project, above all, illustrated that the first one had not been an isolated success. Since then the school has had another project to mark the Shakespeare quatercentenary. This was organised by the head of the English Department and contained items from all children in the school.

5

The Project Method in Contemporary Secondary Education

The promising results obtained from the experiments in the Project Method at Earle School have encouraged me to examine its place in contemporary secondary education.

As mentioned in the first chapter, even though the Project Method has disappeared from the curricula of many secondary schools, many teachers still select those aspects of the Method which can be adapted to their own needs. In an increasing number of Modern schools, however, the growth of external examinations has seriously limited opportunities for project activities, often to the detriment of the average and less able children. This is unfortunate, for the Project Method can provide one way to strengthen and extend basic work and bring purpose and reality to the work of the non-examinable children and, indeed, has much to contribute to the education of all secondary school children. As Sir Fred Clarke wrote: 'The present system of education, though it awakens us intellectually, inwardly leaves us incomplete, stultified and uncreative.'¹ This deficiency has more recently been stressed by the Crowther Committee when it suggested that education was not concerned with filling up a pot but lighting a fire.

In the many enquiries in schools into the use made of the Project Method, I have been surprised at the number of teachers who have recognised the need for project activities but who have been deterred by the difficulties involved in organising them, even within a single subject. There are, undoubtedly, more demands made on the teacher by the Project Method if the activities are to be successful and educationally beneficial to the children, but it is

¹ Sir F. Clarke, *Freedom in the Educative Society*, 1948.

unfortunate if activities of this nature are neglected in the face of the extra demands made on both the teacher and the school. As W. P. Alexander wrote in *The Educational Needs of Democracy*: 'Schools must be prepared to experiment and reconstruct their own methods.' Many schools are doing so, but many are content to cater for those children capable of taking external examinations without any enlightened provision for the average children.

It is for this reason that the Newsom Report has been so enthusiastically welcomed by many secondary teachers. After a decade in which the Modern and newly established Comprehensive schools have been concentrating on the growth of external examinations, some form of equilibrium has been established by the Newsom Committee's investigation into the education of pupils aged thirteen to sixteen of average and less than average ability. The value of the Newsom Report lies not so much in its ideas, for many reflect views expressed by the Hadow Committee of 1926 and ideas already practised by some Secondary Modern schools, but in the fact that educationalists, politicians and the public have been made aware of the deficiencies existing in our secondary education.

In his foreword to the Report Sir Edward Boyle wrote:

The teaching profession, the local education authorities and the Government will need to consider, both individually and jointly, the many recommendations that call for new initiatives, particularly in the fields of research and development. We owe a great debt of gratitude to Mr John Newsom and his colleagues on the Council for the skill and care with which they defined the problem, and so admirably prepared the ground for what I hope will be a general raising of sights in our attitudes towards these people. Their potentialities are no less real, and of no less importance, because they do not readily lend themselves to measurement by the conventional criteria of academic achievement. The essential point is that all children should have an equal opportunity of acquiring knowledge, and of developing their talents and abilities to the full.

The Newsom Committee by its terms of reference examined the problems involved in educating average children between thirteen and sixteen years of age. The results of the survey conducted by the Committee indicate that the attendance figures tend to decline after the third year. This pattern, as I have already shown, emerged from the figures which I obtained after research

into the attendance in my own school and several other Merseyside Modern and Comprehensive schools. The figures emphasise the need to find a new approach and alternative incentives for those incapable of taking examination courses. Whilst, as I have previously admitted, poor attendance could be due to many different reasons, it does give some indication that work in school is not encouraging some children to attend in the face of other demands and attractions. Thus there is a serious need for research and experiments into new methods with sufficient appeal to the average child. 'There is a need for incentives in the early middle years, such as provided by projects.'²

In anticipating the raising of the school leaving age to sixteen, the Newsom Committee realised that a new approach would be particularly vital for the success of the final year at school. Even at present many schools find difficulty in obtaining the interest and co-operation of its fourth year leavers. A closer examination of the attendance figures of two schools shows that the low fourth year attendance is largely due to the even lower attendance of the children who left during or at the end of the fourth year. This alarming picture emerges, despite the provision of courses with a vocational and practical bias in both schools. After allowing for a greater incidence of ill-health, perhaps, it is true that these boys and girls might have lost interest in earlier years and might have opted out of an examination course, but it also means that nothing has been substituted, capable of attracting them to school. Even though the Earle projects did, in fact, achieve this end, I would not claim that project work would always have the same effect. Nevertheless it would appear that project work in one form or another might well have a place in the final year. Schools might benefit considerably if as much attention were given to activities designed for average children and those of higher ability who elected at present to leave at fifteen, as to the provision of examination courses. The Crowther Committee saw this need when it recommended:³ 'The majority must not suffer for the

² Central Advisory Council for Education, *Half Our Future* (Newsom Report), 1963, p. iv.

³ Central Advisory Council for Education, *15-18* (Crowther Report), 1959, p. 89.

minority. Some children are not suited to examinations in the Secondary Modern School.³

The Crowther Committee, in fact, gave the first official indication that the Project Method was restored to favour in the secondary school when it recommended that there should be two leaving dates in the year and that the syllabus should be based on four and two-thirds years, leaving the last term for projects.⁴ The Newsom Committee has developed this idea by stressing the need for children to have an opportunity to plan their own work and in the last year at school to have realistic courses with more character, linked with the adult world.

Various ideas for projects have been suggested by the Newsom Committee for the children in the last year at school, but rather than discuss them in isolation I have attempted to study them in the light of work done by some secondary schools before the Newsom Report was published. Those schools not yet convinced of the value of the Newsom recommendations might be encouraged if they were acquainted with the project activities conducted by others. I have visited or written to many schools in an effort to ascertain how much the Project Method was being used and I am extremely grateful for the co-operation of the head teachers and staffs of the schools. Of the many projects which I have studied, all had a characteristic of their own. Some catered for group work, others for individual assignments; some covered a single subject, others several subjects; some involved only one teacher, others two or more. The most interesting aspect was to see the way in which each project developed around a central theme involving vocational training, community service, etc., as advocated by the Crowther Committee.

The Newsom Committee recommended that girls should have some training in all the wider aspects of home making, family budgeting and marriage.⁵ I was fortunate to be able to visit one school that had already attempted to give its girls such a training. The headmistress of the Edge Hill C.S. School for Girls, Liverpool, had planned a project designed to encourage her girls to become discriminating buyers. Guiding schemes were designed, therefore, for each class, outlining the main lines of approach and

³ 15-18, p. 141.

⁵ *Half Our Future*, p. 37.

suggesting a topic for each year group. The individual class teachers were then left to develop the work along their own lines.

In the four weeks which followed all 400 girls in the school devoted considerable time to the various topics, some working individually, others in groups of three and four. The first year pupils concentrated on foodstuffs and sweets, the second year on household goods, the third on clothing, the fourth on cosmetics and the fifth year pupils on guarantees and insurances. Practically all the work was done in the classroom, in discussion groups guided by the form-mistress and developed in the English, Mathematics, Domestic Science, Art, Needlework and Commercial lessons. As such all the staff were involved in the project in one way or another.

In their spare time the girls continued their research, visiting local shops and making comparisons and tests of various products. Cosmetics, toothpaste, deodorants, bread, biscuits, sugar, soft drinks, sweets, soap powders, nylons, costume jewellery and watches were all subjected to critical observation and carefully recorded in more than 800 essays. Many of the claims made by the producers of household articles were found to be false or misleading.

When completed the work was displayed in an exhibition containing mounted specimens, diagrams and graphs, written work, cooking exhibits and charts. The headmistress, the late Miss Greaves, assured me that the project had achieved more than merely training the girls for their future role as housewives. The work encouraged initiative and gave many girls an opportunity to express themselves orally both in classroom discussions and in interviews with shopkeepers.

The headmistress summed up the project when she told a *Liverpool Echo* reporter:

The project and exhibition were not intended to imitate even in a small way the work of the consumer protection agencies. It was merely a very practical approach to the modern world of shopping and advertising. One day these girls will have homes of their own and they will have to learn to shop wisely. They can only learn by experience and this work will form, I hope, a good basis for the future. The full impact of the research will be felt only when they have left school and started homes of their own.

Having had the opportunity to view the exhibition and talk to some of the girls, I felt that the work had already done much towards making them wiser buyers and I came away a wiser buyer myself.

A similar project on more limited lines was conducted by a class of fourth year leavers at the Wellington C.S. School for Girls, Liverpool. The work was based on the theme of 'Planning a Home' and was conducted by one teacher responsible for the English, Mathematics and Art with the class.

Following a discussion on the basic requirements in a modern home, each girl designed a bungalow which was later drawn to scale. Sketches and plans were made for the decorating and furnishing of each room within a fixed budget. The cost of materials and furniture were found by the girls who visited various shops and compared prices. Later in school they calculated what they could afford within their budget.

Much of the work involved in mortgages, rates, hire purchase, insurance and decorating and furnishing costs was done in the Mathematics lessons on a class basis, after which each girl applied it to her own individual assignment. The finished work was displayed in individual booklets, with descriptions and sketches of each room in the house, together with an account of the cost. Some girls had made models of their bungalows and had fitted furniture and fabrics.

The teacher responsible for the work was convinced that the girls had worked harder than if the work had been dealt with separately in isolated subjects as mere mechanical exercises. The work had been both purposeful and imaginative and had afforded the girls an opportunity to plan within a limited budget. It resembled in many ways the examples quoted in the Newsom Report.⁶

In developing the policy of a training for life, the Newsom Committee considered ways in which some schools were already attempting to prepare their children for the world of work. They wrote:

As we see it, the school programme, in the last year especially, ought to be deliberately outgoing. This means taking the pupils mentally

⁶ *Half Our Future*, p. 39.

and often physically beyond the school walls. It also means bringing men and women from the world outside the walls into the school. It almost certainly demands a greater flexibility in the timetable and in methods of study. And, it may require more time than is normally available inside the conventional day school.⁷

The Committee recommended that experiments enabling some pupils over the age of fifteen to participate to a limited extent, under the auspices of the school, in the world of work in industry, commerce, or in other fields, should be carefully studied.⁸

Many schools have made efforts to provide this training and one of the most exciting experiments was a project conducted by the Rye C.S. School, Sussex. The headmaster, Mr R. S. Rothwell, to whom I am indebted for providing details of the project, had appreciated the need to make the last year at school interesting, purposeful and outward looking. In his own school he had observed a steady decline amongst some children in enthusiasm for academic work and in general interest in school, resulting in frustration and, in extreme cases, indiscipline and rebellion. He quoted extracts from the terminal reports of a boy in the 'awkward squad' category to illustrate the general pattern:

1st year—Effort marks 11 +	Lively, very interested, tries hard.
2nd year—Effort marks 2 +	Capable but more care needed.
3rd year—Effort marks 4—	Below average, little effort.
4th year—Effort marks 9—	Lazy, frequent absences, wastes time, wrong attitude to school work.

The headmaster, after studying cases such as this, came to the conclusion that the lower 'B' and 'C' stream courses were all too often a pale reflection of the 'A' stream course, which was geared, because of examination requirements, to that of the Grammar school. In an effort, therefore, to create purpose for these fourth year boys and girls and to bring their education into closer touch with the realities of the world around them as well as to bridge the dangerous gulf which lay between the world of school and the world of work, he devised a new full year's course with two fourth year forms, one of boys and one of girls. A total of forty-seven

⁷ *Half Our Future*, p. 72.

⁸ *Ibid.*, p. 79.

PROJECT WORK IN THE SECONDARY SCHOOL

children undertook to stay until the end of the school year, regardless of their statutory leaving age.

The aims of the course were to develop a sense of responsibility and initiative, to provide the incentive and to foster the ability to be of service to the community, and to develop a critical faculty in relation to the world around them. It was proposed to achieve this by relating the studies of the children to the life and activities of the local community and by placing them in real situations where they could obtain firsthand experience of the world of work.

In this context the most interesting part of the course was a series of educational visits by the children to places of employment in the locality on one day per week. One series of visits was carried out by the whole group on one day per week to such places as the local gasworks, reservoir, etc. These visits were really no different from those undertaken by senior children in many secondary schools. It was, however, the second aspect of the visits which gave the scheme its importance.

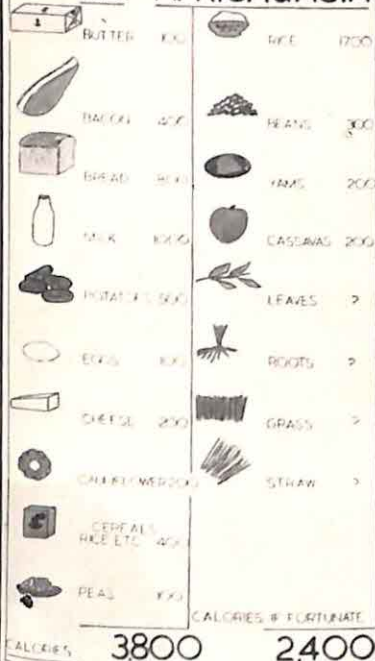
Each child, in addition to the weekly group visits, made a visit of one day's duration to the same place of employment on several different occasions with the approval of the parents and the Chief Education Officer. Each child spent two successive Fridays in a selected place of employment, followed by two in school writing an account and report on his work.

Whilst 'at work' the children were visited by a member of staff who submitted a report to a committee made up of members of staff. Employers also were asked to submit a report on each child, based on a three point scale, as follows:

1. Impression of conduct.
2. Impression of diligence and application to work.
3. Impression of manner in which he/she accepted your advice and instructions.
4. Relationship/manner to employees.
5. Manner to customers.
6. Would you be prepared to give a job—Yes/No.
7. Would you welcome more/less/same supervision on part of staff.
8. Would you extend the same facilities to another—Yes/No.
9. Any other comments.

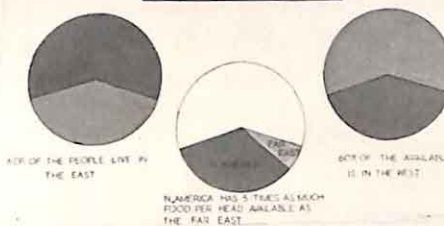
A DAY'S FOOD

U.K. AFRICA & ASIA



THE PROBLEM

60% OF THE WORLD'S POPULATION IS NOT GETTING ENOUGH TO EAT



above: Pie-graphs done by a group of girls (First Project)

20: Photographs of children's work from first and second projects

left: Chart designed by a group of girls as part of work related to Science (First Project)

Graph work (First Project) Design created by 'C' boy

COMPARISON OF WEEKLY CONSUMPTION OF FOOD

U.K.

INDIA

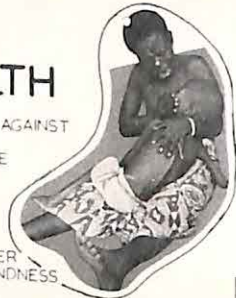




MALARIA

HEALTH

THE FIGHT AGAINST
DISEASE



RIVER
BLINDNESS



KWASHIORKOR



LEPROSY

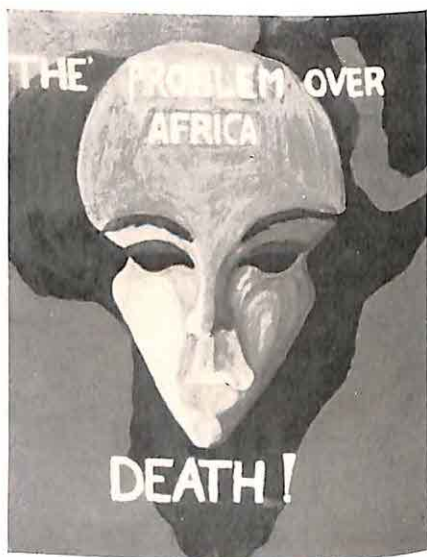


YAWS



TRACHOMA

Poster incorporating illustrations from reference pamphlets (First Project)



Poster designed and painted
by a 'C' boy (First Project)

ALGERIA
 In 1955 Algerian refugees in
 France and Spain and there are 200,000
 Algerian refugees still in Algeria
 but have been driven out of home and
 country by the fighting between the
 Algerians and the French for freedom from
 France

PALESTINE
 Two main waves driven out of Palestine
 by the Jews in 1948 when the new
 state of Israel was formed. Jews
 a million took flight to Syria, Lebanon
 and Iraq. Others fled to the
 West Bank

GUINEA
 UNIFORM
 Conflict caused by tribal warfare in
 Guinea has led to thousands being
 driven out of their homes. 250,000
 Guineans and 10,000 still remain
 in the country

ANGOLA
 In the fight for independence from
 Portugal and many colonies try to break
 away from their mother country. In
 1961 the Portuguese have refused
 to give up their hold and in the
 bitter fighting which has followed
 many Angolans have fled

to Congo and those who stay
 in Angola live in terrible
 conditions. They are all under
 badly clothed and under
 conditions it is easy for them
 to become victims of illness.
 Refugees are now living in camps
 where conditions are worse
 than in the country

CONGO
 RUANDA
 URUGUAY
 ANGOLA

Two refugees who live in the
 Congo have no money for
 food and are having
 difficulty. Some of these
 have not even got a mud
 hut in which they keep
 to stay out of rain

ARABS

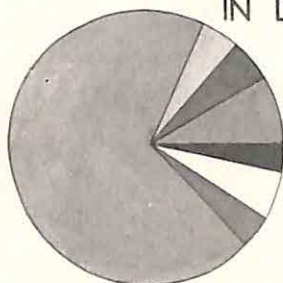
Most of the Arab refugees
 fortunate to find homes
 in Jordan, Iraq and
 Egypt are still suffering.
 They are out of touch with
 and are often victims of
 or less and live in
 one of the day they
 about the desert
 food and water

Introductory Section of a group booklet (First Project)



Model made by a group of boys utilising scrap material (First Project)

INFECTIOUS DISEASES REPORTED IN 1961 IN LIVERPOOL

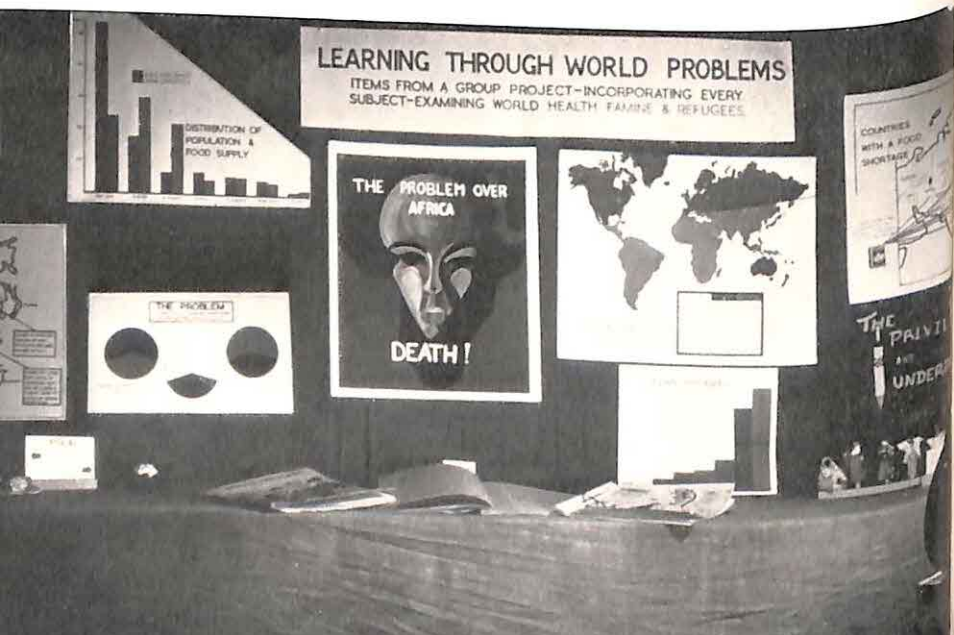


COMPARISON OF FIGURES

-
- | Disease | Relative Frequency (approximate) |
|------------------|----------------------------------|
| Dysentery | 0.35 |
| Measles | 0.25 |
| Pneumonia | 0.20 |
| Pleural Effusion | 0.15 |
| Scarlet Fever | 0.10 |
| T.B. | 0.05 |
| Whooping Cough | 0.10 |

Graph work done by a group of girls (Second Project)

Section of work displayed at a later exhibition



These visits formed an integral part of a course which catered for basic subjects, optional studies and cultural subjects and helped to give the children an insight into the world of work based on their own practical experience. It was found that the children responded well to the more adult approach and that for the great majority this aspect had been most successful. The visits had undoubtedly improved the attitude of the children towards work in school.

Certain limitations, however, were discovered. The headmaster came to the conclusion that if the scheme were to be extended, those in the upper intelligence range of the 'A' and 'B' streams might obtain more benefit from the scheme than the children for whom it was principally designed. There seemed to be a clearly defined lower level, below which children were incapable of deriving real benefit and it would seem that, subject to more research, an I.Q. of 90 marks this lower limit. This represents a serious limitation to a very enterprising project and it is to be hoped that further experiments and modifications, as intended by the headmaster, will make the scheme beneficial to children of lower ability, for it is they who are in need of a new approach.

In recent years my own school has experimented with schemes for community service, in which senior girls have given assistance to old people in the neighbourhood after school. I was, therefore, particularly interested in the Newsom Committee's view that older pupils could be given personal responsibility through community service projects. Examples quoted included not only fund-raising for charitable causes, but also sustained enterprises in the local community such as voluntary assistance in local hospitals, decorating a community centre, making and repairing toys for nursery and infant schools and individual service in schemes for helping elderly or invalid persons. The views of one headmistress emphasise the value of such service:

A troublesome girl can become a most reasonable young lady when helping to tell stories at dinner time to infants, or helping to serve meals or to dress and undress young children. Most important of all, when she has had the status of a young adult for a few weeks she seems to gain in poise and confidence in herself, which halts the downward trend.⁹

⁹ *Half Our Future*, p. 68.

The headmaster of Skelmersdale C.S. School, Lancashire, Mr D. Wilson, realising the need to make the final year purposeful and, again, outward looking introduced a 'Design for Living' project where once a week the fourth year girls spent a whole afternoon on selected tasks. These ranged from visiting old age pensioners in the town in order to clean, run errands or generally keep them company. The girls gave of their own time and even visited the old people on Saturdays. This service was augmented once a fortnight when the girls received into the school babies belonging to local housewives, who were thus given an opportunity to go shopping, etc. The girls, under the supervision of the teacher in charge, looked after the children for two hours, during which time they fed them, changed nappies, and generally kept them occupied. One of the girls told me: 'It was strange at first handling the babies. You have to be so careful. We are now becoming quite expert and the whole class—and the babies we borrow—think it is a smashing idea.'

A local mother of four children expressed her faith in the scheme when she said: 'It is a wonderful scheme. I don't mind lending even my four-year-old daughter, Pauline, because the girls are sensible and are supervised properly. Apart from benefit later in life, it also teaches the girls belonging to large families to help their mothers.' The scheme has brought nothing but praise from other parents and old age pensioners and was given the blessing of the Divisional Education Executive, a member of which said: 'I think the idea is excellent. It helps both the mothers and girls.'¹⁰

The scheme was supplemented by weekly talks by guest speakers on such topics as First Aid, W.V.S., the Blood Transfusion Service, etc., and further instruction on hygiene and child care. The project has developed considerably since its inception. The girls now study diets and food values, write their own stories and make clothes for the babies, whilst the boys have been involved in the production of toys and other equipment. The school hoped to organise a parallel scheme for boys eventually.

The projects described so far represent a selection of those I have been able to study in Secondary Modern schools. It would appear, however, that few schools have undertaken large-scale

¹⁰ *The Skelmersdale Reporter*, 7 November 1963.

projects incorporating many subjects and teachers. I have been interested particularly in the extent to which projects are undertaken in Comprehensive Schools. From detailed enquiries made at four schools on Merseyside, it would appear that the intricate timetabling and rigid specialisation make project activities difficult. Many of the staff to whom I have spoken have expressed a desire to combine with other departments in some form of interrelated study, but as yet these links are very limited, although in fairness to the schools it must be remembered that they are very much in their infancy. At present, however, any project activities which have been undertaken have been limited to one teacher in a single subject or, in the remedial department, in several subjects.

It is to be regretted that the timetable and specialist demands should, at present, dominate the curriculum of those children who will not necessarily be following an examination course. One Merseyside Comprehensive School has already recognised this danger and experiments are to be conducted whereby children in the middle streams will be given the benefit of one class teacher responsible for several subjects, including English, Mathematics, History and Geography. The scheme is to be tried firstly with the first year classes, but if successful it might well be extended to other years. Under these conditions timetable and specialist restrictions would be considerably reduced and teachers would be able, amongst other things, to enjoy project activities more fully.

This freedom is already enjoyed by the remedial classes in many of the Comprehensive schools, where children have one teacher for most of the time. Some very interesting project work in the form of social studies has been done by classes in the remedial departments along lines outlined by the Cheshire Education Committee in its book, *The Secondary Modern School*. The following extract from the scheme of work for the Remedial Department of Brookfield Comprehensive School, Kirkby, near Liverpool, emphasises the importance of project activities:

The basic subjects need to be taught individually or in groups. Other subjects, including History, Geography and Science, should be taught on a centre of interest or topic basis, and can be incorporated into

PROJECT WORK IN THE SECONDARY SCHOOL

environmental studies and projects, although class teaching can be appropriate at times.

It is sound practice to correlate subjects as much as possible with backward children; to incorporate current happenings and events into the work as this will assist the child towards an awareness of the outside world. Visits and visiting speakers are invaluable in helping the child to understand more fully how the world is run.

I was fortunate to be able to spend some time with one such remedial class at St Kevin's Comprehensive School, Kirkby. The class teacher believed in the value of visits to form the basis of his work with the fourth year. I had the opportunity to accompany his class on a visit to Garston gasworks. The boys had previously heard something of the way in which gas was produced and went prepared to ask questions, having prepared the route across the city. I was quite amazed to hear these boys of limited ability asking most relevant questions which at times had the guides perplexed. In the days that followed a considerable amount of work was done in consolidating and extending the visit. Descriptions of the visit were given orally by several members of the class and a lengthy discussion followed. The boys then wrote their own accounts, some making more use than others of sketches to outline the various stages in the production of gas. Maps of the area were drawn to show the other main gasworks and the lines of supply and the boys learned how eventually the gas supply entered our homes and how it was measured and charged.

Of necessity much of the work was simplified and limited in content, but I was convinced that the teacher was doing much through these projects, to arouse the interest of boys who in a more formal atmosphere could have presented serious behaviour problems.

Some schools have already made attempts to compensate for the restrictions imposed by timetable requirements, specialisation and the demands of external examinations. I was very interested to hear, in a 'Tonight' programme on B.B.C. Television, of the activities of the Abbey Wood Comprehensive School, London. Through the producer of the programme I was put in touch with the school and I am extremely grateful for the valuable assistance afforded by the members of staff.

Abbey Wood, like many of the Comprehensive schools, found

it difficult to organise project activities during the main weeks of the school year, so the school organised instead a Project Week during the penultimate week of term, when the timetable was halted and the whole school followed a selected topic for a week. The idea was operated for the first time two years ago, when children selected from nearly forty topics one which they wanted to pursue for a week under the guidance of members of staff. Topics ranged from a down-to-earth course in child care or practical nursing, to Chinese cookery or the history of cars, with a visit to Beaulieu included. In the event of a group being over-subscribed, second and third choices were taken into consideration. Members of staff described for the press the results of the venture and further projects. The following summaries are extracts from these articles.¹¹

The school discovered for the very first time the astonishing reserve of human energy which could be generated in both children and staff by switching over after examinations to a completely new dynamo of interest. The flagging interest was arrested overnight as every child did something he or she wanted to do for its own sake. Staff became the spiders who spun the web of enthusiasm and enmeshed the willing flies in the adventure of doing and finding out together. The great thing about Project Week was that it was an invasion of the adult world on level terms by the child, with no talking down and no make believe. With only a week in which to complete the project, there was a sense of urgency and purpose. The relationship between formal education and 'real living' is often difficult for young minds to discern, but Project Week puts book learning in perspective.

The second Project Week was held the following summer and saw the children able to select from some thirty-eight projects. Two of the most interesting have been the making of a school film and the production of two thirty-five minute sound radio documentaries on 'The Growth of a Community', which was the project featured on television.

The film, a lighthearted production on the lines of the old Ealing productions, dealt with a situation in which fog blanketed Abbey Wood and held up staff from reaching school. The prefects took over and organised the school into one vast bingo game, with numbers called over the Tannoy system from the headmistress' room. The children involved in the production covered many ages and levels of

¹¹ *The Kentish Independent*, 26 July 1963.

PROJECT WORK IN THE SECONDARY SCHOOL

ability and the staff assure me that all played a vital part in the work, thoroughly enjoyed the week and in the process learned much about the technique of film making and photography.¹²

The radio documentary was on a different plane, being a piece of serious social research with an objective value as well as the subjective advantage of bringing the children right up against life as it is really lived. It was hoped that the group of 30 boys and girls, of all ability levels and ranging from 12 to 15 years of age, would begin to understand the possibilities and methods of social research and learn to appreciate sound radio techniques and features and increase their confidence in speaking. The project was introduced by a talk from Jack Singleton, an experienced B.B.C. producer, and the group then heard talks on the history of public housing and town planning, with particular reference to London.

The radio feature had three main sources; the tape recorded interviews with local residents; a questionnaire given to over 5 per cent of the electoral register; the interviews on tape with officials of the L.C.C., the Ministry of Housing, London Transport, a Member of Parliament, a sociologist and a town planner. For most of the week the children were sent out equipped with battery tape recorders in reporting teams of three, each team with a specific assignment. Later one member of the team edited the tape, while the other members went out with the questionnaire.

The results of the project were most rewarding and apart from achieving the aims of the project, the children discovered another approach to précis and comprehension through the editing of interviews and a respect for the need of team work in working to a deadline.

The success of the project was emphasised by the two teachers in charge who said that all the children had worked hard and enjoyed themselves. Even children who did not normally shine in the classroom carried out their parts excellently and at least two children who were normally silent in class were heard on tape conducting an interview forcibly and clearly.¹³

This ambitious experiment represents the efforts of one school to give its children an opportunity to enjoy the benefits of project work, despite administrative difficulties. Others are tackling the problem in different ways. Brookfield Comprehensive School, Kirkby, uses a house in Wales as the centre of some project work. The school bought Dolcorsllwyn Hall in the Dovey Valley in Wales, which now affords an opportunity for Art and Drama

¹² *The Kentish Independent*, 26 July 1963.

¹³ *New Society* (No. 51), 19 September 1963.

groups, Field Study courses and a host of other activities to be centred on the Hall. In addition much work has been done by children in the school, cleaning and repairing the property and making furniture and fittings in school for transfer to the Hall. Coupled with these activities, which form one large project, is the importance given to the act of living together and helping each other in service to a community. As the scheme develops it could become the centre of various projects for the children of Brookfield School, and could serve the same purpose as Colomendy Camp School, near Mold, where groups of Liverpool schoolchildren can spend time during term. Some excellent field study and local survey projects have been done by children of all ages from Modern, Grammar and Technical Schools.

Undoubtedly the expansion in external examination courses has seriously affected the use of project activities in recent years and has resulted in schools devising schemes, as just outlined, to circumvent these restrictions. It is possible, of course, in certain cases to incorporate project work into existing examination syllabuses. In the History syllabus for the former U.L.C.I. Secondary School Certificate, provision was made in Section F for subjects which had been studied as topics, as individual assignments, as part of projects or as background to social studies, provided they were of historical worth. For the most part, however, G.C.E. syllabuses are too rigid and demanding to allow one the liberty in undertaking work through projects.

The introduction of the new C.S.E. examination has opened up vast new possibilities for project work in examination syllabuses. Whilst project activities might not benefit from being used for examination purposes, it is nevertheless reassuring that opportunities might be given for children to achieve examination successes without following a 'watered down' G.C.E. syllabus. If tackled realistically, the marriage of the Project Method and external examinations could well provide a dual incentive for a large number of children.

In its *Examinations Bulletin No. 1*, the Secondary School Examinations Council stressed that in the first instance children should spend no more than two-thirds of their time preparing for the C.S.E. If followed, this wise recommendation would allow

candidates to spend some time on non-examinable work, which could well include project work.

Apart from this, the Council in its consideration of the proposed C.S.E., made reference to the possibilities of project work being considered for examination purposes. This could be done in various subjects, including History and Commerce. Work could be done in topic booklets, to be presented for marking in the examination. Certain difficulties remain, the most important being, perhaps, the need for guarantees as to the authenticity of each child's work. It is to be hoped, however, that such difficulties do not prevent the ideas presented in the Examinations Council's report from being fulfilled. Experiments in several London schools with group and individual projects in Art, providing 75 per cent of the examination mark, suggest that some teachers are anxious to grasp the opportunities afforded by the recommendations. This is borne out by the fact that many Regional Boards have already provided opportunities for project work in their syllabuses.

Another interesting recommendation in the Council's report was that work should not be taught entirely in isolated subjects but that Mathematics, for example, should be applied to other subjects as much as possible.

The proposed C.S.E. examination represents a wonderful opportunity for teachers to break away from the restrictive pattern of the traditional examination. If teachers are bold enough to experiment and construct their own syllabuses, many of the children who take C.S.E. courses will still enjoy the opportunity to benefit from less formal methods of teaching.

It would appear, therefore, that the Project Method after a period in which it had disappeared from the curricula of many secondary schools, could make a marked reappearance in a variety of forms. Already many youths working under the Duke of Edinburgh's Award Scheme undertake extra-curricular projects in Sections D (Girls) and C (Boys). In the future more schools, following the recommendations of the Newsom Committee, might well employ project activities not only with those pupils in their final year but also with children of all ages and ability and even as a part of new C.S.E. examination courses.

Working Paper No. 2 published by the Schools Council outlines

the many demands which the additional year will make on teachers after 1970. Project work could well satisfy some of the problems relating to the curriculum and methods of teaching, but teachers must plan on the basis of a five-year course and not merely as an additional year. Children should be introduced to project work, for example, in the earlier years. For this reason it is to be hoped that more schools will extend project work to all children as curricular or extra-curricular activities. The very flexibility of the Project Method allows schools to pattern activities to suit children of all ages and abilities and to overcome difficulties in school organisation and administration. This asset was emphasised in the *Study Projects Guide* of the Freedom from Hunger Campaign Committee, which stressed that projects could be adapted to suit the conditions inherent to a school's own nature and to the locality in which it is situated.

In closing this study, however, it must be remembered that the Project Method is only a means to an end, an end to which all education should strive. It is, as Nisbet suggests in *Purpose in the Curriculum*, one way whereby children can achieve the aesthetic, social, intellectual and moral aims of education.

A good 'project' [he wrote], has all the requirements—facilities for purposeful co-operation in work, for showing friendliness, for requesting and giving help, for discussion, for informal groupings, for receiving and giving direction, for free mixing and—last but not least—for laughter. We certainly do not advocate a curriculum consisting entirely of projects, but we believe that even the most traditionally conducted lessons could borrow many of the project's social virtues, if the teacher so desired and if he were fully aware of their value.

His following words could serve as a conclusion to this study, 'No teacher at any stage of education, from the infant class to the post-graduate university course, can afford to ignore the project as a teaching method.' The solution, which J. H. Panton¹⁴ described as typically English, would appear to be a compromise in teaching organisation, so as to obtain within the limits of the school organisation as many as possible of the advantages which are claimed for collective class teaching, individual work methods and group activities.

¹⁴ J. H. Panton, *Modern Teaching Practice and Technique*, 1948, p. 224.

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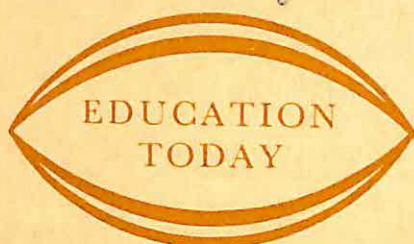
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